Cambridge Centre for Housing & Planning Research

Homes for the future

A new analysis of housing need and demand in England

Technical Report

Research funded by



October 2008



Table of Contents

Part I	Introduction and purpose
Part II	Future numbers of households5
Part III	Future numbers of households in the market and social rented sectors and newly arising demand and need in England9
Part IV	Need for intermediate housing
Part V	Three sector analysis of newly arising demand and need in England in total 24
Part VI	Three sector analysis of newly arising demand and need in England: by region28
Part VII	The backlog of un-met current need for social sector rented housing40
Part IV	Regional analysis of backlog of current un-met need49
Annex A	Right to Buy owner-occupier households dissolved52
Annex B	Comparison with 2005 estimate for Shelter of housing demand and need and the 2006 update

Part I Introduction and purpose

- 1. The purpose of this Technical Report is to put on record the sources and methods used to produce for Shelter the report *Housing Needs in England A New Analysis*. There are three parts to this Technical Report: (a) newly arising demand and need for housing in 2006-26 in England as a whole; (b) newly arising demand and need in the same period in each of the government office regions; and (c) current un-met need also termed the "backlog" of un-met need, at the beginning of the period. Newly arising demand and need is estimated separately for the market, social rented and intermediate sectors. The backlog is of un-met need for social rented housing. A suitable method of estimating un-met need for intermediate housing has not yet been developed. Un-met demand for market housing to rent or buy would pose problems beyond the scope of this report.
- 2. The occasion for producing new estimates of newly arising demand and need for housing and of the backlog of current need for social rented housing is new and higher official estimates of the future population (population projections) and a changed policy context. The Government has set a target of 3 million more homes by 2020, and an annual net increase in dwellings of 240,000 a year by 2016. It has set up the National Housing and Planning Advice Unit (NHPAU) to work with regional planning authorities and local authorities to enable provision to be made of enough land for house building. The aim is to facilitate a sufficient supply of housing to stabilise affordability of house prices, in the sense of the relationship between house prices and real incomes. The Government's targets and NHPAU's housing supply ranges to be tested a re for all tenures together. How much should be on assisted terms i.e. social rented housing or intermediate housing is a question not asked by NHPAU or commented on by the Government in the context of its targets.
- 3. The work reported here was commissioned to provide answers to this question. Many households and would-be households have incomes too low or insecure to meet their housing needs through the market. What proportion they are of the total of households to be housed has obvious implications for public expenditure. It is also closely bound up with whether the targets are attainable or not. The needs of some households must be met on subsided terms if they are to be met at all. Whether private demand in the housing market plus the amount of assisted housing that can be funded within the constraints of public finance will together constitute sufficient effective demand to take up a net increase of 240,000 a year in the housing stock has yet to be investigated.
- 4. The work reported here is directed to the long term, during which there are likely to be further swings up and down in the housing market as well as the current (summer and autumn 2008) downswing. It is therefore not made devoid of meaning by the additions to the housing stock in 2008 and 2009 and (possibly) in 2010 being well below a straight line from 199,000 in 2006/07 (CLG provisional estimate) and 2016. NHPAU emphasises this (Affordability still matters, July 2008).

A downswing in the housing market does not diminish the need for assisted housing: it may indeed increase it for a time. It increases the difficulty of partially funding assisted housing out of development gains. But that is about funding the supply of assisted housing, not about the need for it. A shortfall below 2 million additional homes by 2016 or 3 million by 2020 would not render invalid an estimate of need for assisted housing based on demographic assumptions similar to those that were the context for the targets.

- 5. Three sectors are distinguished within the housing system: market; social rented; and intermediate. The market and social sectors are defined in the same way as in previous work. The market sector comprises owner-occupiers (excluding those who came into owner-occupation through purchase as sitting tenants from local authorities, new towns, and housing associations) plus tenants in the private rented sector who are not receiving Housing Benefit. The "statistical private rented sector" includes households that occupy their accommodation by virtue of employment, including employment by public bodies, for instance Services families accommodated in Services Family Quarters. The social sector comprises tenants renting from local housing authorities and housing associations, private rented sector tenants receiving Housing Benefit, and owner-occupiers who originally purchased their homes as sitting tenants from local authorities, etc. These owner-occupiers, termed in this report "Right-to-Buy" or "RTB" owner-occupiers are included in the social sector because only social sector tenants have access to the Right-to-Buy, and their purchases are not part of the market demand for housing.
- 6. Intermediate housing is a category of need that has come to be recognised as a consequence of steep increases in house prices relative to income putting home ownership out of reach for many households that previously could have afforded it. It would be provided for households that could afford to pay appreciably more for their housing than average rents for accommodation in the social rented sector, but whose incomes are not high enough in relation to house prices to gain access to owner-occupied housing. The households in this situation are primarily new households, and potential new households, but also in principle households moving from lower cost to higher cost (in housing terms) parts of the country, and perhaps also home owners experiencing a sharp fall in their incomes. Information about the second and third categories is hard to come by; so the estimate of need for intermediate housing is based on the circumstances of new households
- 7. Future numbers of households are discussed in the next part of the report. Part III discusses the number of households in the market and social sectors of the housing system, and newly arising demand and need in England in total. Part IV discusses need for intermediate housing, and Part V brings Parts III and IV together to produce a three-sector analysis of newly arising demand and need. Part VI gives a regional analysis. Part VII has new estimates of the backlog of unmet current need for social sector housing. Annex A gives working detail of a component of the estimate of newly arising need for social sector housing, offsets to the effect of past RTB sales on the number of re-lets. In Annex B a detailed

comparison is made between the estimates of housing demand in this report and those made in 2005 of the *Shelter Housing Investment Project 2005 Update*. The detail is in the technical report that supported it, but is referred to for brevity as the *2005 Update*. The estimates of housing demand and need in the market and social sectors were revised in the following year when the (then) Office of the Deputy Prime Minister (ODPM) issued a new, fully post-2001 census household projection. Only the number of households in the market and social sectors were revised. These figures are referred to as the *2006 Revised Estimate*.

Part II Future numbers of households

- 8. Estimates of future numbers of households, conventionally termed household projections, require more discussion than in previous demographically based work on future housing demand and need. The current official (CLG) projection of households in England is 2004-based, in the sense of being derived from the official 2004-based projection of the population. It superseded the 2003-based projection used for the "2006 Revised Estimate" (see previous paragraph), and is just under 200,000 higher by 2021. The Office for National Statistics has since published a new and much higher 2006-based projection of the population. CLG is understood to expect to publish a 2006-based household projection derived from this population in the spring of 2009. Unofficial household estimates, have been derived from it by CCHPR (Alan Holmans and Christine Whitehead, New and Higher Projections of Future Population in England a first look at their implications for Households and Housing, Town and Country Planning Association, September 2008, and by NHAPU. CCHPR, 2006-based estimate of households in 2026 is 786,000 higher than the official 2004-based projection; NHPAU's is 906,000 higher.
- 9. There are queries that apply to both the 2004-based and 2006-based projections. One query concerns household formation by recent immigrants; the other arises from the actual increase in households between 2001 and 2006 being well below the projection. The much higher migration assumptions in the 2006-based population projection the "headline" figure for net inward migration to the United Kingdom in the medium and longer term is 190,000 in place of 145,000 in the 2004-based projection makes household formation by immigrants all the more important.
- 10. Work with information from the Labour Force Survey, reported in Holmans and Whitehead, "More Households to be Housed: Where is the Increase in Households Coming From", Town and Country Planning Association 2006, showed that among persons born outside the United Kingdom and resident in the UK for less than ten years the proportion heading separate households is lower, age for age, than among the population as a whole, though the difference is much smaller among immigrants who have been in the UK longer. This did not matter much when immigration rates were fairly low. But with immigration running at the rates assumed in the 2004-based population projections, and still more so the 2006-based projection, it is much more important. Estimating how great this effect in numerical terms is difficult, but it could be in the range 20-25,000 a year with the

2004-based projection, and around 30,000 a year with the 2006-based projection.

- 11. The increase in the number of households between 2001 and 2006 is estimated from the increase in the dwelling stock, changes in the number of vacant dwellings and changes in sharing through "stock and households identities". This procedure is described in A.E. Holmans "New and Higher Household Projections. But Are the Projections on Track" in Town and Country Planning, May 2007. It estimates the net increase in households between 2001 and 2006 at 838,000, compared with the 2004-based projection figure of 996,000. The difference is 158,000 or 31,000 a year. Again, this not a very firm figure. But given the sources of potential error there is no doubt that the actual increase in households was well below the projection. The significance of this shortfall depends on the causes. One clearly possible cause is high house purchase costs relative to incomes. The projection procedure depends on past trends continuing, but from the turn of the century until 2006 and 2007 the rate of rise of house prices relative to income was far above trend. Affordability on this argument could be a major cause of the shortfall. Another, with different implications is that the increase in the number of divorced and single (in the sense never-married) middle aged men and women has been below the large increases that the 2004-based household projections show. The immigration effect referred to in the previous paragraph is another potential cause. These are all demand-side explanations. On the supply side, the low number of dwellings completed could have held down household formation through insufficiency of household spaces to allow all households to live independently that wished to do so and could afford it.
- 12. The possible explanations of the shortfall of the actual increase in households relative to the projection have different implications for the future. An explanation in terms of high house purchase costs relative to income, or worsened affordability, implies that household formation has been postponed until affordability improves. Similarly, an explanation in terms of shortage of supply implies that as and when supply of housing improves, the households will form and in the medium to long term the projection will prove to be valid. A lower increase in households due to over-projection, on the other hand, or the effect of lower rates of household formation by recent immigrants, would mean that the household projection would over-state the number of households, relative to population, in the longer term.
- 13. There is not the information with which to assess the relative importance of these explanations for the shortfall, which are not mutually exclusive. For present purposes a fully detailed household projection is required, with number of households according to type of household, age of the household representative, and except for couple households his or her sex. The most up to date projection that meets these requirements is the official 2004-based household projection. For consideration is whether it should be scaled up or down, and if so by how much? The view here is that in its own terms (i.e. relative to the 2004-based projection of the population) is that the 2004-based household projection is high, and considered by itself should be revised downwards. The 2006-based population projection

would require an upward revision. Purely by chance, the upward revision due to the 2006-based population projection replacing the 2004-based projection is approximately equal to over-statement in the 2004-household projection due to lower household formation by immigrants. The 2004-based projection is therefore considered suitable for estimating newly arising housing demand and need. NHPAU decided to use the 2004-based household projection (NHPAU, *Meeting the housing requirements of an aspiring and growing nation,* Technical Annex B, paragraph B33). The 2004-based projection for 2006, 2016, and 2026 are shown in Table 1. 2021 is included as the nearest available year to 2020, to which the 3 million target relates.

Table 1 2004-Based household projection for England to 2026

	2006	2016	2021	2026
Married couple households	9,415	9,050	8,978	8,898
Cohabiting couple households	2,181	2,944	3,204	3,424
Couple households sub-total	11,596	11,993	12,183	12,322
Lone parent households (male and female)	1,655	1,830	1,882	1,928
Other multi-person households (male and female)	1,452	1,629	1,708	1,775
Non-couple multi-person households sub-total	3,106	3,459	3,590	3,703
One-person households under age 35	1,050	1,289	1,345	1,332
One-person households aged 35-64 excluding widows	2,746	3,658	4,126	4,521
One-person households, widowed males	486	533	564	594
One-person households, widowed females	1,700	1,596	1,594	1,614
One-person households aged 65 and over excluding				
widows	835	1,307	1,572	1,899
One-person households sub-total	6,816	8,384	9,200	9,951
All households	21,519	23,837	24,973	25,975

Note: Items do not always add to totals owing to rounding

Source: Projection detail provided by Department for Communities and Local Government

^{14.} A very high proportion of the projected increase in households will be one-person households, as can be seen from Table 1, and perhaps somewhat more clearly from Table 2.

Table 2 Composition of future projected increase in households

	2006-16		2010	6-26
	Number ('000)	Percent	Number ('000)	Percent
Couple households (married and cohabiting)	397	17.1	329	15.4
Lone parent households	175	7.6	98	4.6
Other multi-person households	177	7.6	146	6.8
One-person households				
Under age 35	239	10.3	43	2.0
Aged 35-64, excluding widows and widowers	912	39.4	854	39.9
Widows, and widowers all ages	-57	-2.5	79	3.7
Aged 65 and over excluding widows and widowers	472	20.4	592	27.7
All one-person households	1,568	67.6	1,567	73.2
All households	2,319	100.0	2,138	100.0

Note: Items do not always add to totals owing to rounding

Source: Derived from Table 1

15. The projected changes in the number of one-person households warrant further comment, including setting them in the context of past changes. The detail of household projections enables these to be taken back to 1971. The exact division between 1981-91 and 1991-2001 is uncertain owing to difficulties about assessing the under count of the population in the 1991 census, but the general picture is not in doubt. In Table 3 the figure for the changes between 2001 and 2006 are put in brackets because for ease of comparison with the other figures, which are for whole decades, the actual changes in 2001-06 are converted to decade equivalents (i.e. multiplied by 2).

Table 3 Actual and projected net changes in numbers of one-person households in England between 1971 and 2026

(thousands)

	1971-81	1981-91	1991-2001	2001-06	2006-16	2016-26
Widows and widowers	+411	+234	+70	(-132)	-57	+79
Divorced, separated, single						
Under 35	+243	+416	+118	(+60)	+239	+43
35-64	+185	+490	+859	(+1,152)	+912	+854
65 and over	+151	+18	+114	(+228)	+472	+592
Sub-total	+579	+974	+1,091	(+1,440)	+1,622	+1,489
All one-person households	+990	+1,208	+1,021	(+1,308)	+1,568	+1,567

Note: Items do not always add to totals owing to rounding

Source: Household projection detail supplied by Department for Communities and Local

Government and predecessor's in-title

16. Most noteworthy in Table 3 is the way in which the projected increases in middleaged and older divorced, separated, and single one-person households in 2006-16 and 2016-26 compare with what has gone before. The projected decade rates of increase in the 35-64 age groups are similar to 1991-2001, but the projected increases at ages 65 and over are substantially higher. Ageing of divorced, separated and single women living alone is the reason, not more older married and cohabiting couples separating. Marriage rates have fallen to an extent only partly offset by more un-married cohabitation, which is assumed to continue during the projection period. Middle aged older men and women who have divorced or separated from cohabitations are living on their own in increasing numbers instead of forming new couple households, and more may never have entered a couple household at all. The increase in the number of middle aged and older men and women living alone as one-person households appears to be associated with the increasing prevalence of "living apart together", i.e. in a partnership or relationship but with separate residences. In his article "Living arrangements in contemporary Britain" (Office for National Statistics, Population Trends Winter 2005) J. Haskey estimated that there were 1.1 million women and 0.8 million men who said they had a regular partner who lived elsewhere. Men and women in such arrangements who live by themselves are projected to be a growing element of housing demand, and housing need as well.

Part III Future numbers of households in the market and social rented sectors and newly arising demand and need in England

17. The division between the market and social sectors is estimated in the same way as in previous work, from the division in the base period between market and social sectors in categories of households defined by type of household and age and sex of the household representative. At ages 40-44 and below the proportions in the market and social sectors in future years are taken to remain as in the base year. From ages 45-49 upwards the division between sectors is estimated by "rolling" forward" the proportions in the base period. Only small proportions of households move between tenures at ages above the mid-40s, so the market sector proportion among married couple households aged 50-54 in 2006, for example, will be within a little the proportion at age 60-64 in 2016 and 70-74 in 2026. Because at the present time the market sector proportion is higher among married couple households aged 50-54 (84 percent) than at ages 70-74 (77 percent), "rolling forward" will result in a rise in the market sector proportions among older households in future years. The market sector proportions specific for type of household and sex and age of the household head are taken from the Survey of English Housing (SEH) for 2003/04, 2004/05, and 2005/06 combined. These are three most recent years for which the information is available at the time of writing. Three years samples are combined to reduce sampling variation. The previous work on newly arising housing demand and need used base year proportions from SEH in 2000/01, 2001/02, and 2002/03. Base year proportions derived from SEH

for 2003/04 to 2005/06 are taken to apply to 2006. SEH records the characteristics of the "household reference person" whereas the estimates and projections of households work with the "household representatives". There is here an element of uncertainty, though probably not large.

18. The projected totals of households in 2006, 2016, 2021, and 2026 in Table 1 are divided between the market and social sectors of the housing system in the way outlined in the previous paragraph. Base period proportions are taken at ages up to 40-44, and for ages above the mid-40s estimated by rolling forward the base year proportions. Calculations were made for married couple and cohabiting couple households; and separately for male and female lone parent households, other multi-person households, and one-person households. Male lone parent households are too few for the SEH, even for three years combined, to produce sufficiently detailed information to use the same procedure as for other households, so a simpler procedure was used, to take the base year proportions for male lone parent households as applying in all years. The data on tenure are not sufficient for full calculations for widowed and other one-person households separately so they are not distinguished in Table 4. An approximate calculation is discussed subsequently.

Table 4 Projected in England in 2006 to 2026 according to type of household (thousands)

Married couple households	2006	2016	2021	2026
Market sector	7,741	7,549	7,531	7,498
Social sector	1,674	1,501	1,447	1,399
Total	9,415	9,050	8,978	8,897
	3,413	9,030	0,970	0,031
Cohabiting couple households	4 740	0.050	0.500	0.747
Market sector	1,742	2,356	2,562	2,747
Social sector	439	588	642	677
Total	2,181	2,944	3,204	3,424
Lone-parent households				
Market sector	643	702	718	743
Social sector	1,013	1,128	1,164	1,185
Total	1,656	1,830	1,882	1,928
Other multi-person households				
Market sector	973	1,107	1,167	1,217
Social sector	479	522	541	558
Total	1,452	1,629	1,708	1,775
One-person households				
Market sector	4,420	5,577	6,225	6,821
Social sector	2,396	2,807	2,975	3,130
Total	6,816	8,384	9,200	9,951
All households				
Market sector	15,519	17,291	18,203	19,026
Social sector	6,000	6,546	6,769	6,949
Total	21,519	23,837	24,972	25,975
All households: proportions				
(percent)				
Market sector	72.1	72.5	72.9	73.2
Social sector	27.9	27.5	27.2	26.8

Source: Table 1 and see text (paragraphs 17 and 18)

19. A calculation may be made to show how much of the projected increase in the number of market sector households is the result of increases in the market sector shares among older households as a consequence of "rolling forward" the base year proportions; how much is the arithmetical consequence of the projected increase in households in total (i.e. the increase that there would be if the overall market sector share remained as in the base year at 72.1 percent); and the effect

of changes in the mix of types of households and age groups. The last is negative over the period to 2026. The household type with the highest market sector share is married couple households, with 82 percent in 2006; but as a proportion of all households married couples are projected to decline from 44 percent in 2006 to only 34 percent in 2026.

Table 5 Components of projected change in numbers of households in market and social sectors between 2006 and 2026

(thousands)

	Market sector	Social Sector
Overall projected increase in households	+3,213	+1,243
Projected changes in mix of household types and age groups	-390	+390
Projected changes in sector shares specific for household type and age group ("rolling forward")	+684	-684
Total change	+3,507	+949

Source: Calculated from working detail behind Table 4

- 20. The projected changes in tenure proportions due to ageing account for about onefifth of the increase in the number of households in the market sector. But the dominant influence is the overall projected increase in the number of households.
- 21. Because so high a proportion, between 75 and 80 percent of the increase in households in the social sector are one-person households, an analysis by age and sex is shown in Table 6.

Table 6 Projected increase in social sector one-person households analysis by age and sex 2006-2026

			(t	housands)
		Men	Women	Men and women
Age				
Under	35	41	20	61
35-44		84	46	130
45-54		66	56	122
55-64		83	61	144
65-74		62	40	102
75 and	l over	136	39	175
Total	472		262	734

Source: As Table 5

22. Noteworthy is that a larger increase in male than in female one-person households in the social sector is projected, and that the numerical dominance of male one-

person households is greatest in the 75 and over age group. The explanation is to be found in the contrast shown in Table 1 between a projected increase of over 100,000 widowed men (in all tenures) living as one-person households and a fall of nearly 100,000 widowed female one-person households. It is not possible to divide the projected increase in one-person households in the social sector in a precise way between widows and widowers on the one hand and divorced, separated, and single men and women. But an approximate division may be derived from other work done to estimate the number of widow and widower one-person households who will be owner-occupiers. An increase of about 20,000 widowed male oneperson households in the social sector is projected, and a reduction of about 100,000 widowed female one-person households. This reduction in the number of widowed female one-person households in the social rented sector is the consequence of "rolling forward" the proportions of married couple households who will be owner-occupiers, which carries with it a rise in the proportion of men and women who are owner-occupiers when widowed and hence reduces their number in the social sector. The number of divorced, separated, and single one-person households who are in the social sector is therefore projected to increase between 2006 and 2026 by 810,000 (in reality about 800,000), of whom 450,000 are men and 360,000 are women. The number of widowed female one-person households in the social sector is projected to fall by about 100,000, and the number of widowed male one-person households to rise by about 20,000. These figures sum to the total of 734,000 (if rounded) in Table 6.

23. The projected increases of 3,507,000 households in the market sector and 949,000 in the social sector (Table 4) are the first and in many ways the most important component of an estimate of newly arising housing demand and need between 2006 and 2026.

Other components are:

- (a) Any increase or decrease in the number of secondary residences or second homes
- (b) Any increase or decrease in vacant dwellings
- (c) New housing provision (new build, gains from conversion, and changes of use) to replace losses from the dwelling stock through demolition or transfer to nonhousing uses
- (d) Replacement of social sector re-lets lost as a consequence of past Right-to-Buy sales
- (e) Provision in the social sector to offset a reduction in private rented sector accommodation available to households needing Housing Benefit to pay the rent.

Of these (a) and (b) derive the required net increase in the housing stock from the projected net increase in households in total and in each sector; and (c) converts the

required net increase in the housing stock to gross new provision of housing by new building and conversions, including conversion of non-residential buildings. The other two items, (d) and (e) are specific to the social sector and affect the division between new market sector and new social sector provision, but not the total for both tenures together.

- 24. Secondary residences: Information made available by the Department for Communities and Local Government (CLG) derived from Council Tax data puts the annual average increase between 2002 and 2007 at 12,600. The reported increase varied from year to year. But this source is considered preferable to the Survey of English Housing which was previously used, because SEH reports only second homes belonging to households living in England. Second homes belonging to residents of other countries are therefore not included, nor any secondary residences belonging to corporate bodies. The large number of "Council Tax second homes" in central London suggests that second homes belonging to corporate bodies could be significant. The number of second homes (including secondary residences belonging to corporate bodies) is taken to increase by an average of 12,000 a year. This assumption does not affect the estimate of newly arising need in the social sector.
- 25. Vacant dwellings: There are two ways to estimate the number of vacant dwellings that should be included in an estimate of the number of dwellings required to meet newly arising demand and need. One is to take the number of vacant dwellings that would maintain a constant vacancy rate in a growing housing stock. The other is to take a target vacant rate, lower than the actual rate, and subtract the difference from number of dwellings inferred from the increase in households. The second method is not really applicable in the market sector as the powers available to give effect to policies to reduce the number of vacancies are very limited. The number of privately owned vacant dwelling is reported in Housing Strategy Statement Statistical Annexes (HSSA) to have fallen by 37,000 between 2001 and 2006. That was a period of housing market boom, so it is unlikely that market pressures could reduce private sector vacancies much further. The assumption is therefore made that the 2006 total of private sector vacant dwellings, 586,000 (3.3) percent) according to HSSA, will increase at the same percentage rate as the market sector housing stock. HSSA has limitations as a data source, but no postcensus alternative suggests itself.
- 26. In the local authority and housing association housing stocks numbers of vacancies are available from administrative sources, and published in *Housing Statistics* 2006, Tables 1.7 and 1.8. Figures for vacant local authority dwellings and vacant dwellings belonging to Registered Social Landlords (RSLs) are what is required. But transfers from local authorities to RSLs, and figures for RSLs being only for general needs housing with a change in 2005 in the definition of "general needs" cause difficulty. Vacant dwellings belonging to RSLs are taken from HSSA, which gives 40,100 in 2006 compared with 36,400 in 2001. Local authorities' vacants are taken from Table 1.7 in *Housing Statistics* 2006, which gives 80,300 in 2001 and 42,900 in 2006. The vacancies total for local authorities and RSLs together in 2006

- is 83,000. Some of the reduction from 117,000 in 2001 may have been due to vacant dwellings being demolished in regeneration schemes. This process may have further to go; but with the evidence available it seems reasonable to reckon on the number of social sector vacant dwellings increasing so as to keep the overall vacancy rate unchanged from 2006, 2.1 percent.
- 27. New provision to replace losses from the dwelling stock is difficult to estimate and forecast owing to limited information and uncertainties about policies. Since 2006 CLG (and predecessors in-title) has ceased to publish estimates of components of change of the housing stock, but only annual net increase (see Housing Statistics 2006 Table 1.2 and Housing Statistics 2007 Table 1.2). These tables also show the number of newly completed dwellings. The net increases in the stock are shown to exceed the number of new dwellings, by increasing margins. Gains to the housing stock from conversion of larger houses into flats and of non-residential buildings into houses or flats therefore exceed dwellings demolished. CLG estimates (provisionally) that the net increases in the housing stock is 2006/07 in England was 199,000, compared with 168,000 new dwellings completed Housing Statistics 2007 Table 2.1. Gains from conversion and changes of use are thus being estimated to exceed losses by 31,000 in the year, which implies that losses recorded are few. Without separate and trustworthy figures for losses it is not possible to make an estimate of their number in future years.
- 28. The uncertainty about policies is about how much building there will be by housing associations to accommodate owner-occupiers and private sector tenants displaced in the course of regeneration schemes for areas of private housing. In view of both the statistical and policy uncertainties it is necessary to cast the estimates of future housing demand and need in terms of the net increase in the stock of dwellings. That is the "currency" in which the Government's housing supply targets (paragraph 2 above) are expressed.
- 29. Replacing "lost" social rented sector re-lets comes into the calculation because when a Right-to-Buy owner-occupier household dissolves, the dwelling it occupies is bought by another owner-occupier (or bought by an investor for renting out); but if it had remained in the social sector it would have been available for re-letting to a household needing a social sector tenancy. The number of re-lets "lost" depends on the number of Right-to-Buy owner occupier households that will dissolve in 2006-2026. This is a complicated calculation because it includes one-person households formed when one member of a married couple household dies, and how long these successor one-person households survive. This calculation is in Annex A. A further complication is that where demand for social sector tenancies has fallen since the dwellings were sold there may be no need to replace the relets. No allowance has been made for this possibility in this calculation owing to the rise in house prices and housing costs relative to income in all regions, and the large projected increase in households.

- 30. Provision in the housing association sector to offset falling numbers of private sector lettings accessible to households with Housing Benefit. This item was included because from the mid 1990s until 2002/03 the number of private sector tenants receiving Housing Benefit fell by more than could be explained by falling unemployment and improving employment opportunities. That was interpreted as meaning that the supply of private sector lettings available to tenants that depended on Housing Benefit was declining, and hence more of the need for social sector accommodation having to be met by local authorities and housing associations. After 2002/03 the total of private sector tenants receiving Housing Benefit as estimated form the Survey of English Housing ceased to fall, even though unemployment continued to decline. A possible fresh cause of a fall in the supply of lettings by private landlords to Housing Benefit tenants is the forthcoming introduction of the Local Housing Allowance scheme for Housing Benefit for private sector tenants. The scheme was introduced experimentally in 9 local authority areas, and the consequences studied in research commissioned by the Department for Work and Pensions (DWP). This research found (Local Housing Allowance: Final Evaluation) that a substantial minority of landlords said that they could be less likely to let to Housing Benefit tenants with a local housing allowance schemes in force. Also found was that the actual decline in lettings as reported by landlords was very small, and that the changes in number of new Housing Benefit claims and the number of claims in payment (the "caseload") were much the same in the 9 areas as elsewhere. No allowance is therefore made for new housing provision by housing associations to offset a decline in lettings available to Housing Benefit tenants from private landlords, though the possibility would need to be looked at again when Local Housing Allowances are in full effect.
- 31. The components of newly arising demand and need are brought together in Table 7. Needless to say, they do not purport to be accurate to the nearest thousand to which they are shown, to minimise rounding discrepancies.

Table 7 Newly arising demand and need for housing in England in 2006-2026

(thousands)

	2006-16		2016-26			2006-26			
	Market sector	Social sector	Total	Market sector	Social sector	Total	Market sector	Social sector	Total
Net increase in households	+1,772	+546	+2,318	+1,735	+403	+2,138	+3,507	+949	+4,456
Secondary residences	+120	0	+120	+120	0	+120	+240	0	+240
Vacant dwellings	+58	+11	+69	+57	+9	+66	+115	+20	+135
Replacement for "lost" social sector re-lets due to earlier Right-to-	-243	+243	0	-243	+243	0	-486	+486	0
Buy stock									
Total demand and need for net increase in the dwelling stock	1,707	800	2,507	1,669	655	2,324	3,376	1,455	4,831
Annual average	171	80	251	167	66	232	169	72	242

Source:

Table 4 and see text

32. A version of Table 7 for the period from 2006 to 2021 is shown below, for possible use in connection with the 2020 target.

Table 8 Newly arising demand and need for housing in England 2006-2021

(thousands)

	Market sector	Social sector	Total
Net increase in households	+2,684	+769	+3,453
Secondary residences	+180	0	+180
Vacant dwellings	+89	+16	+105
Replacement for "lost" social sector re-lets due to earlier Right-to-Buy	-365	+365	0
sales			
Total demand for net increase in the dwelling stock	+2,588	+1,150	3,738
Annual average	173	77	249

- 33. Very important to note is that Tables 7 and 8 are estimates of the net increase in the housing stock that would meet newly arising demand and need, not provision for additional housing by new building or conversions. The difference between the average annual estimates of newly arising demand and need in 2006-21 and 2006-26 (Table 7) is due to demography, the projected increase in the population and changes in its age structure.
- 34. The estimate of newly arising need for social housing in Table 7 was from a two-sector calculation, with three sectors including intermediate housing there could be an overlap. This is studied in the next part of the paper.

Part IV Need for intermediate housing

35. Need for intermediate housing is estimated from information about the number of new households, their incomes, and their housing tenure. Because house prices vary so greatly between regions, to a far greater extent than do average rents for social rented housing, a national estimate has to be built up region by region. Information about rents and house prices by region is used to define lower and upper boundaries of a range of incomes for intermediate housing, and information from the Survey of English Housing (SEH) about the income and housing tenure of new households used to estimate the number of new households within each region with incomes within those boundaries. The lower boundary is defined as the income where the average social sector rents plus £25 a week equals 30 percent of the net income of the household head (or reference person) and spouse or partner. £25 a week is added to average weekly rent, because without such an addition there would be households with incomes just above the lower limit who would need almost as much subsidy as tenants of social rented housing. A characteristic of intermediate housing is that it should be more lightly subsidised than social rented housing proper. The upper boundary is derived from lower quartile house prices in each region. From the lower quartile price a "user cost" is calculated, which comprises mortgage repayments on a loan of 90 percent of the purchase price, interest foregone on the deposit of the other 10 percent, and the cost of insurance of the structure of the dwelling. Because the interest rate for interest foregone on the deposit is lower than the mortgage interest rate, the user cost is slightly lower, relative to the house price, than mortgage loan repayments at the present time. The upper boundary of the income range for intermediate housing is for net income at which the user cost with a lower quartile house price for the regions is equal to 30 percent of net income. The average rents, and lower quartile house prices used in making the estimate of need for intermediate housing are for 2004/05, 2005/06, and 2006/07, the 3 most recent years for which the information is available. Net income is gross income less income tax and employees' National Insurance contributions. Survey information about the incomes of new households is in terms of gross incomes, so gross incomes equivalent to the net incomes that form the lower and upper boundaries were calculated from the personal income tax allowance, the reduced rate income tax band, the basic rate of income tax and the lower earnings limit and contribution rate for National Insurance. For the lower boundary the gross income is taken to be earned by one household member. For the upper boundary 2 earners are assumed, with the division of income between them such that both have incomes above the income tax basic rate threshold. These assumptions are in line with the fact that few social sector tenant households include 2 earners, whereas many owneroccupied and private sector tenant households do so. Table 9 shows the boundaries of the income range for intermediate incomes in each region.

Table 9 Income ranges for intermediate housing by regions

Lower

	boundary	boundary
	(£/week)	(£/week)
North East	360	480
North West	370	540
Yorkshire and Humber	360	550
East Midlands	380	700
West Midlands	380	680
East of England	420	930
London	500	1,300
South East	450	1,050
South West	400	930

Source: Average housing association rents, lower quartile house prices, and user costs from CCHPR Datastream

- 36. The house price levels on which the income ranges are based, 2004/05, 2005/06, and 2006/07 combined, are about 8 percent below the 2007 prerecession peak in house prices. The income ranges are assumed to remain to rise in line with incomes generally, and so bring similar proportions of new households into the income range for intermediate housing in future years. If house prices were to rise at a distinctly slower rate than incomes in the longer term, the income range for intermediate housing would take in a somewhat smaller segment of the housing market in the later years of the forecast period than at the beginning.
- 37. Information about the incomes of new households is taken from the Survey of English Housing (SEH) in 2003/04, 2004/05, and 2005/06, the 3 most recent years for which information is available at the time of writing. Three years were combined to increase the sample numbers available for analysis; but since only about 2 percent of all households are new households, in the sense of having formed in the previous year, 3 years' SEH samples provide only 1,200 or so new households, which is not many for 9 regions with cross-divisions between ranges of incomes and tenure. A starting point is the number of new households in each region as estimated from SEH, divided between those with incomes below the lower boundary of the range for intermediate housing, within that range, and above the upper boundary. Table 10 shows as a first stage the number of new households in each region below, within, and above the range for intermediate housing.

Table 10 New Households in 2003/04, 2004/05, and 2005/06 combined: first stage estimate

(thousands)

	Below intermediate housing range	Within intermediate housing range	Above intermediate housing range	Total
North East	19	4	4	27
North West	35	7	12	54
Yorkshire and Humber	21	9	8	38
East Midlands	17	12	5	34
West Midlands	24	8	5	37
East of England	20	17	5	42
London	40	23	7	70
South East	31	26	3	60
South West	19	14	3	36
England	226	120	52	400

Note: Detail doe not add to totals owing to rounding Source: CCHPR from data made available by CLG

- 38. The picture of numbers and proportions of new households within the range of incomes for intermediate income and above it appears generally plausible; but there are oddities that are likely to be due to sampling variation. Examples are the difference between the proportion of new households within the intermediate income range in East and West Midlands, where the boundary incomes are very similar; and the smaller proportion of new households within the intermediate income range in the North West regions than in Yorkshire and Humber, although the incomes are very similar. Instances such as these balance out within national totals, but would need looking at again at regional level.
- 39. The total in Table 10 of 400,000 new households was derived from SEH sample data by the same procedure as published totals of new and moving households. Some households move more than once (including forming a new household) within a year. When this happens, SEH takes the most recent move for the classification of moving households by tenure of origin and destination. Where, for example, a new household is formed in private rented housing and then within a year moves to owner-occupation, the household is counted as having moved as a continuing households from private renting to owner-occupation. The forming of a new household in the private rented sector is lost from view. Work done in CCHPR, to be published as a working paper *Estimates of Households Formed, Moving, Dissolved and Departing in England in 1991-2001 and 2001-2006* attempts to estimate the number of new households not counted in this way and their tenure. This work suggests raising the total of new households formed in a year from 400,000 to 458,000. Most of the additional new households are in

the private rented sector, as shown in Table 11. Movement of households is much more frequent in the private rented sector than in other tenures.

Table 11 Number and tenure of new households formed within one year England 2003/04 to 2005/06

(thousands)

	SEH standard grossing	With allowance for new households missed through multiple moves within year
Owner-occupiers (a)	115	123
Social sector tenants	89	95
Private sector tenants	196	240
All tenures	400	458

Note: (a) Includes an adjustment (taken from the private rented sector) for under-representation

of owner-occupier new households in 2005/06

Source: See text (paragraph 39)

40. The upward adjustment of 58,000 new households in England as a whole is apportioned between regions pro-rata within each tenure. Owing to the large private rented sector in London, the procedure allocates 20 percent of the upward adjustment to London. Within each region and tenure the adjustment is allocated pro-rata to below the income range intermediate housing within it, and above it. The estimate produced of new households according to tenure within the income range for intermediate housing in each tenure is shown in Table 12.

Table 12 Tenure of new households in England with incomes within the income range for intermediate housing

Total	139,000
tenants	
Private sector	73,000
tenants	
Social sector	9,000
Owner-occupier	57,000

Source: See text (paragraphs 44 and 45)

41. Table 12 shows estimated numbers of households within income ranges derived from 30 percent of net income being available for rent or house purchase. It is evident that many households either spend more than that to buy a house, or have funds from other sources such as gifts or loans from family or friends. Some however may have stretched their finances severely to buy a house and so would have preferred to buy on intermediate housing terms if they had been available. In previous work the assumption was made that 10 percent of owner-

occupier new households within the income range for intermediate housing would take up intermediate housing if it were on offer. The same assumption may reasonably be made here, to give 6,000 owner-occupier new households who might take up intermediate housing. This is higher than the previous estimate (2006 Revised Estimate) of 4,000 owing to higher house prices and hence the width of the range of incomes for intermediate housing. The 9,000 social sector tenants within the income range for intermediate housing are an overlap between the estimates of need for social rented housing and intermediate housing.

42. How many of the private sector tenants new households with incomes within the range for intermediate housing would need intermediate housing or would take it up if were on offer is difficult to assess. The income ranges are derived from costs of house purchase not exceeding 30 percent of net income, not private sector rents. A criterion of rents not exceeding 30 percent of net income has not been tested due to lack of evidence about market rents and the extreme diversity of the rents in what information there is. From what is known about rents is likely that an appreciable proportion of new households might be paying less than 30 percent of net incomes for rent. That this is so was recognised in previous work, and the assumption made that one-third of private sector tenants within the income range for intermediate housing would not take up offers of intermediate housing because they had advantageous results. That assumption related to an estimate of 22,000 private rented sector new households with incomes within the range for intermediate housing (2006 Revised Estimate, Table 8). With the present estimate of 73,000 the assumption that two-thirds (49,000) would take up intermediate housing or indeed need it seems unlikely. Further consideration is needed of what would be the best assumption to make. But as an interim working assumption two-fifths is taken. The estimate of need for intermediate housing by new households is therefore as shown in Table 13.

Table 13 Newly arising need for intermediate housing in England

In owner-occupied housing 6,000
In social sector renting housing 9,000
In private sector rented housing 29,000
Total 44,000

Part V Three sector analysis of newly arising demand and need in England in total

- 43. The two-sector analysis of newly arising demand and need in Part III of the paper and the estimate of need for intermediate housing in Part IV may be brought together. Bringing in need for intermediate housing does not affect the total net increase in the housing stock required to meet newly arising demand and need for housing, but does require alteration of the division between sectors. There is an overlap of 9,000 between estimated newly arising need for social rented housing and intermediate housing. This is the consequence of the distribution of incomes of social sector tenants including some with incomes high enough to pay considerably more for their housing than the rents charged by housing associations. There is no suggestion that they "ought" to take up intermediate housing, not least because for people whose incomes are variable from month to month or year to year their income at any one point in time is not necessarily a reliable guide to how large a long term commitment to payment of housing costs it would be prudent to make, for instance the mortgage element of shared ownership or Social Homebuy. The overlap has just to be noted, with no hardand-fast rule about where these new households should be in a three-sector analysis of newly arising housing demand and need.
- 44. The overlap between need for intermediate housing and the market sector is much more problematic. The estimate in Table 15 is much higher than the previous estimate, in Table 9 of 2006 Revised Estimate, which was based on house prices in 2002/03 and 2003/04. One possible interpretation is that owing to the rise since then in house prices relative to incomes, many more new potential households could not afford a house or flat to themselves, and so would have to live in only parts of multi-occupied houses or in someone else's home as a concealed couple family, or simply not form. The problem about accepting such an explanation in its entirety is that so much of the calculated need for intermediate housing is from renters that have incomes too low to afford to buy a house with 30 percent of net income. Inability to afford to buy a house with 30 percent of net income is not necessarily the same thing as inability to afford adequate rented housing for that amount. With the growth of renting by younger households it is less easy than formerly to assume that a high proportion of households in rented accommodation not able to afford house purchase are in need of intermediate housing, or would take it up if offered.
- 45. In Part IV of the paper the assumption was made that two-fifths of private sector tenant new households within the range of income for intermediate housing would want it, and in a sense would need it. The total need for intermediate housing estimated in this way is 44,000 a year (Table 12), equal to 18 percent of the total net increase in the dwelling stock required to meet newly arising demand and need (Table 7). This is much higher than the previous estimate (2006 Revised Estimate (see Annex B) Table 9) of 28,000, which is equal to 13 percent of the required net increase in the housing stock. The principal reason

for the difference is the much larger number of private sector tenant new households within the range of incomes for intermediate housing, due partly to the higher upper boundary, partly to the larger (including the upward adjustment described in paragraph 39) number of private sector tenant new households and partly sampling variation. To put in a still higher figure for private sector tenant new households needing intermediate housing would seem liable to strain credibility. The estimated total need for "affordable" housing (in the sense in which it has come to be used as a term of art) is shown in Table 16. The first decimal place of percentage is shown solely to avoid rounding discrepancies.

Table 14 Newly Arising need for "affordable" housing and total required net increase in the dwelling stock in England 2006-2016

(annual averages, thousands)

	Bas	is A	Basis B		
	Number	Percent	Number	Percent	
Social rented	72	29.8	63	26.0	
Intermediate	35	14.5	44	18.2	
"Affordable" sub-total	107	44.2	107	44.2	
Market	135	55.8	135	55.8	
Total	242	100.0	242	100.0	

Note: In Basis A the overlap between the social rented and intermediate sector is put with the

social rented sector; in Basis B with the intermediate sector

Source: Tables 7 and 15

46. In Tables 13 and 14 the estimate of need for intermediate housing is an annual gross flow of new households. The estimate of newly arising need for social rented housing, in contrast, is a net increase in the dwelling stock to accommodate an excess of households needing to enter social rented housing over dwellings in the stock vacated by households departing or dissolved. The net increase of 72,000 in Table 7 represents the difference between 250,000 to 300,000 households needing to move into social rented sector housing, and between 200,000 and 250,000 households moving to other tenures (excluding sitting tenant purchasers) or dissolved. Nearly 200,000 of the new tenants are accommodated from vacancies within the stock of nearly 4 million dwellings. Nothing like the same proportion of new entrants to intermediate housing can be accommodated from vacancies. When a household that acquires a house through Homebuy moves the house is sold and becomes part of the stock of market sector dwellings for sale. Similarly, if a household with shared ownership purchases the rest of the equity and then sells the dwelling, it becomes part of the market sector. There is however increasing interest in ways of providing housing for purchase at prices well below full market levels but with restrictions to prevent re-sale at market prices, to ensure that such dwellings remain within the affordable stock. Particularly is this so of housing in rural and retirement areas where demand from inward movers with high incomes allegedly has forced up house prices beyond the reach of local residents. This could well be a major

growth area for intermediate housing over the twenty year time span that this report covers. For this reason it is reasonable to assume that over the whole period an annual average of perhaps 10,000 households entering intermediate housing will be accommodated in dwellings vacated by households who occupied them on intermediate housing terms, i.e. "re-cycled" intermediate housing. A sector analysis, on that assumption, of required provision of new building plus conversion gains minus losses from the stock is shown in Table 15.

Table 15 Required net increase in housing stock (new build plus conversion gains less losses) in England 2006-2026

(annual averages, thousands)

	Bas	is A	Basis B		
	Number	Percent	Number	Percent	
Social rented	72	29.8	63.	26.0	
Intermediate	25	10.3	34	14.1	
"Affordable" sub-total	97	40.1	97	40.1	
Market	145	59.9	145	59.9	
Total	242	100.0	242	100.0	

Source: Tables 7 and 13 and see paragraph 46

- 47. Table 15 shows an average of 145,000 dwellings a year (plus any offsets to dwellings demolished or transferred to non-housing uses) being provided on market terms. Perhaps it is only coincidence that this figure is in the same parish as annual rates of building for the private sector before the onset of the current slump in the housing market and house building. It is also higher than in all years since the mid-1970s apart from the peak years of the 1980s boom (1986-89). This figuring could be interpreted as indicating that about 140-150,000 new dwellings a year is what effective demand in the market sector will support in normal conditions and that anything much above that, e.g. to reach a target of 240,000 a year (net increase in stock) will require subsidy. The need for additional social rented sector dwellings is put at 60-70,000 a year, and for "affordable" housing in total at 95-100,000.
- 48. In its Advice to the Minister for Housing (*Meeting the housing requirements of an aspiring and growing nation: taking the medium and long term view* June 2008) NHPAU advised that Regional Planning Authorities should be asked to test through the planning process ranges of average net additions to the housing stock that add to totals for England of 231,500 (in 2008-26) a year at the lower end and 260,700 a year at the upper end. NHPAU used both a "Demographic Method" and an "Affordable Model". The demographic method has many similarities to the estimate of newly arising demand and need in Part III of this report, and indeed uses the same household projection, CLG's official 2004-based household projection. The upper end of the supply range is informed by the findings from the affordability model of the volume of additional housing

required to stabilise the ratio of house prices to earnings (on specified assumptions about the rate of rise of real incomes and about mortgage interest rates) and of new supply sufficient to remove the backlog of what NHPAU terms "constrained demand". Estimates of the backlog of current un-met housing need are in Part VII of this paper. NHPAU's supply ranges include "minimum delivery point" figures for 2016 and total net additions by 2020, since such figures were included as targets in the *Home for the Future* Green Paper.

Part VI Three sector analysis of newly arising demand and need in England: by region

- 49. In this section of the report estimates are made of demand and need for social rented housing and intermediate housing in each of the government office regions of England which are compatible with the estimates made for England as a whole using national data. Regional estimates are made of the net increase in households in the market and social sectors of the housing system from the regional household projections published by CLG, and regional information about the tenure of households in categories defined by age and type of household. This regional household information, from the Survey of English Housing (SEH) is used to project the tenure of households in future years by "rolling forward" the tenure proportions in age ranges above the mid 40s (see paragraph 17 above). The independently estimated household totals in each sector in each region have then to be controlled to the national figures.
- 50. The need for controlling regional figures to be compatible with national totals is due primarily to sampling variation in the regional data being greater than in the national totals. The source of the data used is the samples from the Survey of English Housing in 2003/04, 2004/05, and 2005/06, the most recent available 3 years at the time the work was done. The three years' samples were combined, for use both at national and regional level. With 9 regions the sample numbers available at regional level are much smaller than nationally, and the possibilities of erratic variation therefore greater. For projecting future tenure proportions by "rolling forward" the tenure proportions in each 5 year age group, fairly even progressions are required. Irregular differences between adjacent age groups have to be smoothed out, in which an element of judgement is inevitable. Greater uncertainties than at national level are inherent in regional estimates of newly arising demand and need for housing.
- 51. A two-sector estimate of newly arising demand and need for additional housing is made first, with demand and need divided between the market and social rented sectors. As at national level, need for intermediate housing is introduced as a second stage, to produce a three-sector estimate. The regional estimates of newly arising need for intermediate housing are compatible with the national figure, because the national figure was built up from regional figures, for reasons given in Part IV above.
- 52. The demographic component, the division of households into two sectors or three is the primary part of estimate of newly arising demand and need at regional as at national level. The other elements of the present estimate of newly arising need for social rented housing are the change in vacant dwellings and replacement of re-lets lost as a consequence of earlier sales of dwellings to sitting tenants, colloquially "Right-to-Buy" or RTB sales. For reasons discussed in connection with the national estimate of newly arising demand and need, provision to offset a reduction in lettings by private landlords to tenants that

depend on Housing Benefit is not considered necessary. Because what is estimated in the needed net increase in the social rented housing stock, nothing is included to replace dwellings that are demolished. In the market sector there is as well the increase in secondary residences, often termed second homes. The way in which these subsidiary items were estimated is described later in the report.

53. The regional household totals in 2006 and 2026 are taken from the official 2004-based household projections published by the Department for Communities and Local Government (CLG). They are discussed together with possible upward revisions, in connection with the national estimates in Part II above. They have to be used for present purposes, because the method for dividing the increase in households between sectors requires projections of numbers of households analysed by sex, age, and type of household. Table 16 shows the projected household totals by region. For working purposes separate detail is required by type of household – married couple households, cohabiting couple households, lone parent households, other multi-person households, and one-person households. This detail is not shown here for reasons of space.

Table 16 Projected households in 2006 and 2026

(thousands)

	2006	2026	Increase 2006- 2026
North East	1,107	1,229	122
North West	2,940	3,453	513
Yorkshire and			
Humber	2,178	2,645	467
East Midlands	1,848	2,290	442
West Midlands	2,243	2,607	364
East of England	2,373	2,968	595
London	3,175	3,835	660
South East	3,442	4,160	718
South West	2,214	2,789	575
England	21,519	25,975	4,456

Note: Small discrepancies come from the household projection tables provided by CLG Source: 2004-based household projections provided by CLG

54. To divide the net increase in households between the market and social sectors, total households in each region in 2006 and 2026 have to be divided between the two sectors. The division in 2006 is derived from the SEH information for 2003/04,, 2004/05, and 2005/06 combined about tenure proportions in each of the categories of households referred to above. For married couple households

and one-person households (male and female separately) the proportions in each age group are required for "rolling forward" to project tenure proportions in future years. At national level "rolling forward" was shown to be important only for married couple and one-person households. The growth of cohabiting couple households has occurred too recently for there to be many cohabiting couple households at the ages where "rolling forward" of tenure proportions is important, even in 2026. Similarly lone parent households (with dependent children) are few at those ages. A simpler procedure, to apply the same tenure division in both the end year and base year was used for these categories of household. A division between the market sector and social sector in 2006 and 2026 was worked out for each of the five household categories in each region. This detail also is not shown for reasons of space. The summary, for all categories of household combined, is shown in Table 17.

Table 17 Estimates and projections of households in the market and social sectors in 2006 and 2026 by region

(thousands)

	2006					
	Market Sector	Social sector	Total	Market Sector	Social sector	Total
North East	688	419	1,107	801	428	1,229
North West	2,078	862	2,940	2,464	989	3,453
Yorkshire and Humber	1,554	624	2,178	1,949	694	2,645
East Midlands	1,381	467	1,848	1,752	538	2,290
West Midlands	1,527	716	2,243	1,816	791	2,607
East of England	1,773	600	2,373	2,278	690	2,968
London	2,086	1,089	3,175	2,532	1,303	3,835
South East	2,695	747	3,442	3,211	949	4,160
South West	1,737	477	2,214	2,332	566	2,789
England	15,519	6,000	21,519	19,026	6,949	25,975

Source: Author's calculation from sources cited

55. The projected net increases in households in each sector are shown in Table 18. Also shown there, for convenience, are the proportions of households in the market sector in 2006 and 2026.

Table 18 Projected net increase in households by tenure in 2006-26 and proportions of households in the market sector

Proportions in

	Net increase in households			market sector	
	(thousands)	(percent)		
	Market Sector	Social sector	Total	2006	2026
North East	113	9	122	62.1	65.2
North West	386	127	513	70.6	71.4
Yorkshire and Humber	395	72	467	71.3	73.7
East Midlands	371	71	442	74.7	76.5
West Midlands	289	75	364	68.1	69.7
East of England	505	90	595	74.7	76.8
London	446	214	660	65.7	66.0
South East	516	202	718	78.3	77.2
South West	486	89	575	78.5	79.7
England	3,507	949	4,456	72.1	73.2

Source: As Table 2

56. Table 18 shows 63 percent of the total projected increase in households in the social sector as being in London and the South of England. This is distinctly higher than the proportion of the total increase in all households, 57 percent. In the South East and London the projected increase of 416,000 in the number of households in the social sector is 44 percent of the England total, as compared with 31 percent of the increase in all households. Part of the explanation is in the projected changes in the proportion of market and social sector households due to ageing, by "rolling forward" the tenure proportion from the base year as described in paragraph 17 above. Table 19 shows the increase in households there would be in the social sector between 2006 and 2026 separately in London and the South and in the Midlands and the North with no change in the proportions in the social and market sectors, and the effect of the change in the tenure proportions.

Table 19 Projected the changes in number of households in the social sector: division between London and the South, and the Midlands and the North

(thousands)

	London and the South	Midlands and the North	England
Overall projected increase in households	+673	+570	+1,243
Projected change in sector shares specific for household types and ages ("rolling forward")	-270	-414	-684
Changes in mix of household types and age groups, etc	+192	+198	+390
Total	+595	+354	+949

Source: Table 5 and see text (paragraph 56)

- 57. There are differences between the regions of the Midland and the North and between London and the other southern regions. London is distinctive because of its untypical mix of household types and ages. In the South East and South West, the regions with the highest proportions of owner-occupiers and of households in the market sector the profile of tenure with respect to age is flatter than in the Midlands and the North. The proportion of market sector households does not diminish as fast and the proportion of social sector households increase as fast; so rolling forward the tenure proportions in the 50s, 60s, and 70s age groups has a smaller effect.
- 58. Regional estimates of newly arising demand and need for housing in the social and market sectors are derived by supplementing the net increases in households in Table 18 by estimates of the change in the number of vacant dwellings, the offset to re-lets "lost" as a consequence of earlier Right-to-Buy sales, and (in the market sector) increases in the number of secondary residences. Regional figures for each must add to the national total.
- 59. Vacant dwellings The national estimates of newly arising demand and need assume that vacant dwellings in each sector will increase in proportion to the projected increase in the dwelling stock from the levels in 2006. Vacancy rates vary between the regions in both the market and social sectors, for a number of reasons. The assumption made here is that the national figures for the increase in households can be apportioned between regions pro-rata to the increase in households in each sector (as inferred from the increase in households and the offset to lost re-lets). Regional specialist knowledge might suggest different assumptions. But since at national level the projected change in vacant dwellings, in the social sector is only 1,000 a year, little difference could be made to the prospect in the regions for new social sector need by different assumptions about vacant dwellings. The projected increase in vacant dwellings in the market sector vacant rate is greater. But 2006 was a year when demand in the market

- was strong, so a fall in vacancies due to further strengthening of demand would seem unlikely. Powers to give effect to policies to reduce vacant dwellings are limited in their effect.
- 60. Offset for "lost" re-lets due to Right-to-Buy The sample numbers in the Survey of English Housing are too small for independent estimates at regional level by the method used to produce the national estimate (486,000 in 2006-26). The national total is therefore divided between the regions in proportion to the estimates (from SEH) of the numbers of present owner-occupiers in each region who originally became owner-occupiers by purchase as sitting tenants from public authorities and housing associations.
- 61. Secondary residences The national total of 12,000 a year is apportioned between regions pro-rata to the net change between 2002/03 and 2003/04 (combined) and 2005/06 and 2006/07. Pairs of years are taken because the published figures (by CLG from Council Tax information) are subject to erratic variations from year to year. There is room for doubt about some of the regional figures produced by this procedure, for instance that the highest increase will be in the West Midlands. Alternative bases might be used, for instance increases in the proportion to the present distribution of second homes.
- 62. Table 20 shows the two-sector estimate of newly arising demand and need for additions to the housing stock at regional level. It is in terms of 20 year totals for 2006 to 2026 to reduce the need for rounding and consequent discrepancies.

Table 20 Two-sector estimate of newly arising demand and need at regional level in 2006-2026 North North Yorkshire East West East London South South London **East** West and Midlands Midlands East West Humber Social sector Net increase in households Increase in vacant dwellings Offset to "lost" re-lets +39 +65 +52 +43 +65 +52 +39 +486 +67 +64 Total 1,455 Market sector Net increase in households 3.507 Increase in second homes Increase in vacant dwellings Offset to "lost" re-lets -39 -65 -52 -43 -65 -52 -67 -64 -39 -486 Total 3,376 Market and social sectors Net increase in households 4,456 Increase in second homes Increase in vacant dwellings Offset to "lost" re-lets Total demand and need for net additions to the 4,831 housing stock

63. Needles to say, the figures in Table 20 do not purport to be accurate to the thousands to which they are shown. Annual equivalents are shown in Table 21. First decimal places of thousands (i.e. nearest hundred) are needed in order to keep rounding discrepancies to a minimum.

Table 21 Two-sector estimates of newly arising demand and need for additions to the housing stock in 2006-26

(thousands annual averages)

	Social Sector	Market sector	Total
North East	2.5	14.7	7
North West	9.8	17.5	27
Yorkshire and			
Humber	6.3	17.3	26
East Midlands	5.8	17.5	23
West Midlands	7.1	13.9	21
East of England	7.2	24.6	32
London	14.2	21.8	36
South East	13.5	25.1	39
South West	6.5	24.5	31
England	73	169	242

Source: Derived from Table 20

- 64. The numbers of households were derived from trend projections of the population. No allowance is therefore made for the possibility that there might be difficulty about finding space for an increase of 36,000 a year in the housing stock in London far into the future.
- 65. Income ranges for intermediate housing, and numbers of new households with income below, within, and above these ranges in each region are in Tables 9 and 10 above. The housing tenure of households within the income ranges for intermediate housing in each region are shown in Table 22.

Table 22 Housing tenure of new households with incomes within the range for intermediate housing

(thousands)

	Owner- occupied	Social sector tenant	Private sector tenant	Total
North East	2.5	0.7	1.2	4.4
North West	3.9	1.1	2.4	7.4
Yorkshire and				
Humber	3.2	1.1	5.7	9.0
East Midlands	6.5	0.7	6.5	13.7
West Midlands	5.7	0.4	3.3	9.4
East of England	10.4	2.1	6.9	19.4
London	5.8	1.8	20.0	27.6
South East	13.3	0.7	16.7	30.3
South West	5.4	0.7	10.2	16.3
England	56.7	9.3	72.9	138.9

Source: As Table 11

66. For reasons discussed in paragraph 42 above in connection with the national estimate of newly arising need for intermediate housing, not all the new households within the income range for intermediate housing would want it if offered. The assumption made for the national estimate of need for intermediate housing is that 10 percent of the owner-occupiers would take up intermediate housing if it were offered to them. The owner-occupier households within the income range for intermediate housing have already brought houses; and many of the private sector tenants could well be paying less than the payments made by house buyers. The social sector tenants in the range for intermediate housing come from the upper part of the income distribution for their tenure. There is no presumption that they "ought" to be in the intermediate sector. If they have fluctuating incomes, income as reported in a survey for a week or a month may well over-state their ability to take on long term commitments such as shared ownership or a Homebuy mortgage. Table 23 shows the estimated need (or demand) for intermediate housing in each region, on the assumptions stated.

Table 23 Need or demand for intermediate housing

(thousands per year)

	Owner- occupied	Private sector tenant	Total excluding social sector tenants	Social sector tenants
North East	0.3	0.5	0.8	0.7
North West	0.4	1.0	1.4	1.1
Yorkshire and Humber	0.3	2.3	2.6	1.1
East Midlands	0.7	2.6	3.3	0.7
West Midlands	0.6	1.3	1.9	0.4
East of England	1.0	2.8	3.8	2.1
London	0.6	8.0	0.6	1.8
South East	1.3	6.7	8.0	0.7
South West	0.5	4.1	4.6	0.7
England	6	29	35	9

- 67. It is necessary to have regard to the fact that the estimate in Table 23 of need for intermediate housing rests on an array of assumptions. It is based on house prices in 2004/05, 2005/06, and 2006/07, and therefore has built into it a fall in house prices relative to incomes from the high levels reached in 2006/07. In the longer term it assumes that house pries will rise with incomes. A slower rise in house prices in the longer term would reduce the number of households with incomes within the price range for intermediate housing, though not by much. Not many of the households within this range have incomes close to the upper boundary.
- 68. Table 23 shows a gross flow of households into intermediate housing. If some of them were accommodated in intermediate housing vacated but kept within intermediate tenure ("re-cycled" intermediate housing) the need for new building would be less. There is increasing interest in intermediate housing being provided on these terms. As in the national estimate, the assumption is made that in the longer term an average of 10,000 households a year entering intermediate housing are accommodated in "re-cycled" intermediate housing. They are assumed to be in proportion to the gross flow.
- 69. Table 23 may be brought together with Table 20 to provide a three-sector analysis of newly arising demand and need for housing at regional level. In the national three-sector analysis (Table 14) two bases are shown, (A) with the overlap between intermediate housing and the social rented sector included with the social rented sector, and (B) with it included with the intermediate sector. Two bases in the same table would be unwieldy in a regional table, so a mid-

point is taken, with total of 97,000 dwellings in the social rented and intermediate sector combined – which together might be termed the "affordable" sector in the sense in which this expression is used as a term of art – divided into 67,000 in the social sector and 30,000 in the intermediate sector. Table 24 shows the three-sector analysis by region. First decimal places are shown for working purposes only.

Table 24 Three-sector analysis for newly arising demand and need for net additions to the housing stock in 2006-2026

(thousands)

	Market Sector	Intermediate sector	Social sector	Total
North East	3.9	1.0	2.1	7
North West	16.4	1.5	9.1	27
Yorkshire and Humber	18.0	2.4	5.6	26
East Midlands	15.0	2.7	5.3	23
West Midlands	11.3	2.9	6.8	21
East of England	22.4	3.6	6.0	32
London	16.3	6.7	13.0	36
South East	20.3	5.8	12.9	39
South West	21.4	3.4	6.2	31
England	145	30	67	242

Source: Tables 23 and 20

- 70. Table 24 shows that need for intermediate housing is concentrated in the South of England, 65 percent of the total. That would be expected from the higher house prices in the South relative to income. More significant in a sense than two-thirds of the newly arising need for intermediate housing being in the South is the estimate in Table 27 of a need of almost 5,000 a year in the North, and between 5 and 6,000 a year in the Midlands. In the previous estimate (2005 Update) the need was put at nil in the North and 1,000 a year in the Midlands. The rise in house prices in the Midlands and the north is of course the explanation. It shows that estimates of newly arising need for intermediate housing are sensitive to the levels of house prices used to define the range of incomes for intermediate housing.
- 71. Also noteworthy, and different from previous estimates of housing demand at regional level in the Shelter Housing Investment Programme series, is the high proportion of the need for social rented housing in the South of England outside London. In the South East region, one-third of all newly arising demand and need is shown as being for social rented housing, 12,900 a year. The previous estimate was 7,500 a year. The high proportion in London is partly explained by

the exceptionally high proportion of households there that are lone parents and younger one-person households, with much lower proportions of couples, the type of household least likely to be social sector tenants. The explanation for the South East is different, the profile of tenure with respect to age. Overall, the proportions of households that are in the market sector diminishes and in the social sector rises with age after age 55-59 or thereabouts. Ageing therefore results in a reduction in households in the social sector. In the South East the decline in the social sector proportion with age is less pronounced, and so the effect of ageing on the number of social sector households is smaller. This aspect of housing prospects in the South East region came to light as a result of making demographically-based projections of housing tenure for each region individually. Previously the increase in the proportion of households in the market sector and reduction in the social sector estimated for England as a whole was assumed to apply in each region individually (see Annex B). This appears to have led to the need for social housing in the South East having been under-stated. Tenure proportions specific for type of household and age are estimated from three years' data from the Survey of English Housing. In terms of population and households the South East is the largest of the regions. But tenure proportions there are considerably more subject to sampling variability than are the tenure proportions at national level. With greater sampling variability goes more erratic variation between proportions in adjacent age groups that has to be smoothed for producing a profile of tenure with respect to age.

Part VII The backlog of un-met current need for social sector rented housing

- 72. The "backlog" of un-met current need comprises households and would-be households without a home of their own or whose home is unsuited to their needs. It is a backlog of need for social sector rented housing, from households and potential households who either have to enter the social rented sector for their need to be met, or are already in the social rented sector but in housing not suited to their circumstances (for instance too small). A backlog of need for intermediate housing might possibly be developed, to set alongside the need from new households discussed in Part IV of this report. It might comprise private sector tenants whose accommodation is unsuited to their circumstances but is all they can afford; or owner-occupiers who are hard pressed in keeping up their mortgage payments. No attempt is made here to develop the concept or estimate the numbers. The market sector works in terms of effective demand rather than need. Un-met demand can occur owing to supply shortages. But that is not for discussion here.
- 73. The backlog of need for social rented housing resembles a pool and not a fixed stock. Households enter it by losing their homes for example, or becoming crowded because of increasing family size. They can leave it through being allocated a social sector tenancy, or finding privately owned housing that they can rent with the help of Housing Benefit. What has to be attempted here is to estimate the size of various elements of which the pool is comprised, with allowance for overlaps, between them.
- 74. In this report the estimates of some elements of the pool, notably private sector tenants and owner-occupiers needing social rented housing, have been reviewed and up-dated. In previous housing need estimates in the Shelter Housing Investment Project series, not all of the components of need were regularly up-dated. Some remained unchanged from the original estimates in A. Holmans *Housing Demand and Need in England 1991-2011*, published in 1995 by the Joseph Rowntree Foundation. What was recent information then from the 1991 *Routes into Local Authority Housing* survey became more and more dated, though used by Barker as late as 2003. These sources have not been used in this report, and attempt made to partially replace them with more recent information. This information is not as good as the original, since it is not from a specialist survey. But it is thought that being more up to date makes it worth using.
- 75. Three categories of current un-met need for social sector rented housing may be distinguished.
 - (a) Households and would-be households without a house or flat to themselves, whether because they are not accommodated in a dwelling at

- all, or live in only part of a dwelling. They are counted as part of un-met need if they want self-contained accommodation.
- (b) Households in self-contained accommodation of which they are the owner or rent from a private landlord, but for whom the accommodations is unsatisfactory and a move within the owner-occupied or rental market to more satisfactory accommodation is not feasible, usually for financial reasons. To meet their needs the social rented sector would need to be enlarged; but the moves would release accommodation for sale or rent in housing markets, except where poor condition made it hard to let or sell. Poor physical condition of private housing is taken to be dealt with by improvement in situ rather than by building for replacement.
- (c) Households in social rented sector accommodation that is unsuitable through being too small or in other ways, e.g. children accommodated in flats which have an entrance above the ground floor. Most such needs would be met by transfers within the social sector stock. Some new building might be needed to meet special needs, such as houses big enough for very large families.
- 76. The first category of un-met heed households and potential households without self contained accommodation and wanting it comprises:
 - (i) Homeless households accepted by local authorities as homeless and living in bed and breakfast hotels, hostels, and refuges.
 - (ii) Concealed families (couples and lone parents) living as part of someone else's household and wanting separate accommodation. Adult individuals living in their parents' households or in flat shares or the like are not counted as part of current need.
 - (iii) Private sector tenants in shared housing who strongly prefer separate housing.
 - (iv) Hostel residents who have not been accepted as homeless
- 77. Quarterly figures for households accepted as homeless by local authorities and living in *bed and breakfast hostels, hostels and refuges* are published by CLG. The figures used in the report are averages of the four quarters of 2006 (from CLG, *Housing Statistics 2007,* Table 7.7). These sum to 13,400, say 13,000 in round terms. Later figures are available, but it is considered preferable to keep the estimates of un-met need as far as possible to the same year (2006).
- 78. "Concealed families" are family units that live as part of someone else's household, such as recently married couples living with in-laws or a deserted young mother who has gone back to her parents. Although colloquially they may

be said to be sharing with in-laws or parents, they are not separate households and so technically do not share with other households. There are two sets of estimates of concealed families: from the 2001 census, and from the 2004-based household projections published by CLG. The definitions are different. The census (Census 2001 National Report for England and Wales Table S011) includes concealed families with only non-dependent children, whereas the household projections count as lone parent families only those with at least one dependent child. "Dependent" here means under age 16 or aged 16-18 and in full-time education. Also different is how the "concealed" family is determined in a two-family household, or in a household with one family plus other adults. The census definition is in terms of family and household reference person. Who is household reference person is determined by economic status: full-time employment ranks highest, then in part-time employment, then unemployed, then retired, then other. "Other" includes sick and disabled; so in household where there are two families, one with a retired reference person and the other with a reference person who was sick or disabled, the retired person would be household reference person and the family of the disabled reference person would be the concealed family. In the household projection, which is the concealed family is governed by family type (couple outranks lone parent) and age. A comparison of numbers and ages of concealed families in the two sources is shown in Table 25.

Table 25 Concealed families

						(thou	sands)		
		Age							
		Under 30	30-44	45-64	65-74	75 and over	Total		
Census: (Englar	nd and Wales)	69.5	36.5	28.1	25.4	10.3	169.8		
All concealed fan	nilies excluding lone	69.4	35.4	22.6	22.5	7.8	157.5		
parents with only	non-dependent children								
Household proj	ection (England 2006)	71.5	50.7	13.6	1.4	0.8	138.1		
Source:	Census – see text (pa	· · · · · · · · · · · · · · · · · · ·		0.4	_				

Household projection – from detail supplied by CLG

79. The survey of shared accommodation in 1990 by the Office of Population Censuses and Surveys – Shared accommodation in England 1990 (HMSO) found that the age distribution of heads of concealed family units (Table 3.4) was much closer to the distribution of the household projection in Table 28 than of the census concealed households. Proportions of concealed families wanting separate accommodation were published only for all ages together, owing to the sample size. Thirty nine percent of all concealed family heads said that they would strongly prefer separate accommodation (Table 3.27). This proportion is applied to the total of concealed families in 2006 as taken from the household projection, which gives 54,000 as the estimate of concealed families needing

- separate accommodation. The survey of shared accommodation is now very dated, but must still be used in the absence of more timely information.
- 80. Households in shared accommodation are independent households, in contrast to concealed families which are part of someone else's household. The number of households in non-self-contained accommodation is estimated from the Survey of English Housing. In 2004/05 the numbers of sharing households is estimated at 53,000 owner-occupiers, 22,000 social sector tenants, and 137,000 private sector tenants, 212,000 in total. For 2005/06 the total is estimated at 224,000. Owner-occupiers sharing a dwelling are likely to be letting parts of their homes to tenants or allowing them to stay rent free. They are most unlikely to want housing in the social rented sector. There are too few social sector tenants in OPCS's 1990 shared accommodation survey for a meaningful proportions preferring separate accommodation to be calculated. But they are probably best regarded as a category of social sector tenants whose accommodation may not be suited to their circumstances. The private sector tenants in shared accommodation that want separate accommodation, on the other hand, can be regarded as part of current needs. The OPCS's shared accommodation survey found (Table 2.18) that 45 percent of renters in non-self-contained housing strongly preferred self-contained accommodation. There is an element of ambiguity in that in housing schemes where residents share the use of a common room or day room the scheme could be counted as one dwelling and the residents living in non-self-contained accommodation. Schemes of this kind are often run by housing associations, which were much less prominent in 1990. For present purposes the number of private sector tenants in shared accommodation is put at 65,000, which allows for a modest increase in the number of sharing households between 2005/06 and 2006/07.
- 81. Hostel residents who have not been accepted as homeless by local authorities are a group about whom little is known, as there is no regular survey of them. The 2001 census enumerated 25,770 usual residents (excluding resident staff) in hostels. Two thousand seven hundred and forty two were under age 18 and so not likely to be potential households, which leaves 23,000 who might be in need of separate accommodation. Some of them would be included in households accepted as homeless by local authorities and in temporary accommodation (see paragraph 77). These were between 8,000 and 9,000 in total in 2006. They are households so the number of individuals, excluding children, could be higher. That would leave possibly 11-12,000 hostel residents who had not been accepted as homeless.
- 82. More recent information is that collected and published by "Homelessness Link" in 2008 through its "Survey of Needs and Provision" (SNAP). It found a total of 57,000 "bedspaces" (the counting unit for hostel accommodation), of which just under 9,000 were in "first stage" and 48,000 in "second stage" accommodation. First stage accommodation is direct access, often emergency accommodation to which people can self-refer, such as night-shelters. Second stage

accommodation is for longer stays, and is often literally a second stage for people entering the hostel system through first stage accommodation. Second stage accommodation is a potential source of need for social sector accommodation - a move from a second stage hostel to a council or housing association flat is often envisaged as a way of helping people back into mainstream society. How large is the potential need for social rented housing is difficult to assess. In the first place the number of residents is likely to be less than the number of bedspaces. Much more difficult is what proportion of them could take on a tenancy, in view of the problems reported by the SNAP survey as affecting "clients" - drugs, alcohol, offending behaviour. A proportion of 40 percent may be taken, somewhat arbitrarily which gives about 20,000 in round terms. A question is whether there is any duplication between this 20,000 and the between 8,000 and 9,000 households accepted as homeless and accommodated temporarily in hostels and refuges (see paragraph 77 above). No mention of households accepted as homeless is made in the SNAP report, and the discussion there of funding makes clear that Supporting People is predominant. It therefore looks as if there is not significant overlap. Four thousand five hundred of the households accepted as homeless and accommodated temporarily in hostels (see paragraph 77 for source) included children, who could not be included in the SNAP survey. Hostel residents not accepted as homeless are therefore put at 20,000.

- 83. In summary, estimates of households in the first category of current un-met need, households and potential households without self-contained accommodation in (approximately) 2006 comprise:
- (i) Officially accepted homeless households in bed-and-breakfast hostels, 13,000 and refuges (paragraph 77)
- (ii) Concealed families wanting self-contained accommodation (paragraphs 54,000 78-79)
- (iii) Private sector tenants living in dwellings shared with someone else and 65,000 wanting self-contained accommodation (paragraph 80)
- (iv) Hostel residents other than included in (i) above (paragraphs 86 and 87) **Total of above**152,000
 - 84. The second category of un-met need for social rented housing is *owner-occupier* and private rented sector households, other than those living in part of a dwelling and so included in the first category. These comprise:

- (v) Private sector tenants who live in crowded conditions
- (vi) Owner-occupiers and private sector tenants on social sector housing lists, including (a) households with a member with limiting long-term disability; (b) on lists for other reasons, such as difficulty with the rent or mortgage, or foreseen loss of accommodation (for instance retiring from unemployment with housing that goes with the job).
- (vii) Household accepted as homeless and accommodated temporarily in dwellings owned by the private sector.
 - 85. The number of private sector tenants in crowded accommodation defined as having fewer bedrooms than the "standard" number which is a function of the number and sex of household members, their ages and inter-relationships is estimated from the Survey of English Housing for 2004/05 to 2006/07 at **130,000** (from CLG Live Table 806). There is probably some duplication with private sector tenants in shared accommodation (paragraph 80 above).
 - 86. Owner-occupiers and private sector tenants on social sector housing lists are another component of the backlog of un-met need. The surveys of waiting lists in 1988 and 1991 for the Department of the Environment that were published in *Queuing for Housing* and *Routes into Local Authority Housing* showed that owner-occupiers and private sector tenants had their names on waiting lists for a range of reasons. Examples were households with limiting illnesses or disabilities and could not access suitable housing through the market; households who were finding the mortgage payments or rent very difficult to afford; or were expecting to have to give up accommodation that goes with their job, e.g. through retirement.
 - 87. The 1988 and 1991 surveys have not been repeated, and information from them is now too dated to use. A partial substitute was sought from the Survey of English Housing. Estimates were made of the number of owner-occupiers and private sector tenants on social sector housing lists in 2003/04, 2004/05, and 2005/06 combined, and within those totals the number reporting long term illness and disability. The totals of owner-occupiers and social sector tenants on waiting lists are estimated as 131,000 and 244,000 respectively. **Fifty three thousand** of the owner-occupiers and **67,000** private sector tenant households reported limiting long-term illness disabilities.
 - 88. The 1988 and 1991 surveys showed that owner-occupiers and private sector tenants were on waiting lists for reasons other than disability. It is not possible to estimate their number from SEH, but it would seem unjustifiable to ignore them completely. So the assumption is made that of owner-occupiers and private sector tenants on waiting lists excluding those with disabilities, one-third are in need of social sector housing. That assumption gives (244,000 minus 76,000 x

one-third) **59,000** private sector tenants and (131,000 minus 53,000 x one-third) **25,000** owner-occupiers needing social sector accommodation for reasons other than long term disability. Owner-occupiers and private sector tenants whose accommodation is in poor repair, or not energy-efficient are not part of this category of need. For them improvement *in situ* is likely to be more appropriate than a move to a social tenancy.

- 89. In 2006 rather more than 49,000 households accepted as homeless were accommodated temporarily in accommodation leased from the private sector by local authorities or registered social landlords, and a further 10,000 in other private sector accommodation (*Housing Statistics 2007*, Table 7.7). Local authorities use private sector leased accommodation because their and registered social landlords' housing stocks are not large enough to accommodate all homeless households that they accept. New building would enable them to do so, and cost savings would be possible in many instances owing to the rents paid on leased accommodation. There have though been reports of homeless households in leased accommodation being reluctant to move to vacancies in local authorities' own stocks.
- 90. In summary, estimates of the second category of un-met need for social sector housing, households in the *private rented and owner-occupied sectors other than private sector tenants who share a dwelling* comprise:

	Total of above	394,000
(vii)	Homeless households accommodated temporarily in housing belonging to private owners	59,000
(vi) (b)	other owner-occupiers with private sector tenants on social sector housing lists for other reasons (paragraph 93)	85,000
(vi) (a)	Owner-occupiers and social sector tenants on social sector housing lists with limiting disabilities (paragraph 92)	120,000
(v)	Private sector tenants in crowded accommodation (paragraph 90)	130,000

- 91. There may be duplication between (v) and (vi)(a) and between (v) and (vi)(b). There may also be duplication between (v) and (iii) in the first category.
- 92. The third category of un-met current need for social sector dwellings is from present tenants whose *accommodation is unsuitable in relation to the size and composition of their households*. Two specific groups may be identified:

- (viii) Households in crowded accommodation.
- (ix) Households with children living above the ground floor.

Households in accommodation that is unsuitable for reasons not to do with household size and composition, such as poor repair or inadequate thermal insulation, are not included here. In most instances transfers within the stock would be the means of meeting these needs of categories (viii) and (ix). Some new building might be needed of particular types of dwelling, such as houses for large families, or family houses more generally where there are many families with children in flats. But transfers to houses from flats and moves to larger accommodation more generally would release flats and small houses that could meet the needs of concealed families and sharing households and other categories of need in the owner-occupied and private rented sectors for social sector rented housing. If the social sector housing stock is being increased in order to accommodate households from other sectors of the backlog, providing for households who are already social sector tenants need not add much to the total new provision required. It would be taken up in the mix of new dwellings.

- 93. The number of social sector tenants in crowded accommodation, i.e. with fewer bedrooms than "standard" (see paragraph 85 for definition of the concept and source of the figure) is estimated from SEH information at **227,000**.
- 94. The number of households with children living in flats above the ground floor (defined by the floor where the front door is) is estimated from information from the Survey of English Housing (SEH) for 2003/04, 2004/05, and 2005/06. Information was collected also by the 2001 census about "lowest floor level" of accommodation occupied by households with dependent children. "Dependent children" are under age 16 (the school leaving age) and, if in full-time education, 16-18. Households with dependent children with lowest floor level at first floor or higher in the council and "other social rented" sectors are given as 226,000 in Table 017 of Census 2001, National Report for England and Wales. This figure refers to England and Wales. The SEH data give an estimate of 135,000 households with one or more children under age 15 living in flats and maisonettes in the social sector with the front door on the first floor or higher (CCHPR from survey data made available by CLG. The difference between the two estimates is too large to be explained by differences of definition or date. A different estimate derived from SEH by a slightly different method is 176,000. It is preferred as being closer to the census figure.
- 95. The number of households in this third category of un-met need is therefore estimated at:

(viii) Social sector tenants in crowded accommodation. 227,000

(ix) Social sector tenant families with one or more children under age 15 176,000 living in flats where the front door is on the first floor or higher.

Total of above 403,000

96. Duplication between the groups of households included in the estimate of the backlog of un-met need for social sector housing must be considered. Private sector tenants in shared accommodation (iii) could be in crowded housing (v), or on social sector housing lists (vi)(b). The numbers in the three groups that could overlap one with another are respectively 65,000, 130,000, and 59,000. The 1990 shared accommodation survey (see paragraph 84 above for reference) estimated (Table 2.10) that 5 percent of sharing households in all tenures had fewer bedrooms than standard. The proportion for sharing tenants would be higher than this, but 6,000 seems as many of the sharing households that can be taken off the crowded households for duplication. An equal number might be taken off the number on housing lists. The overlap between crowded private rented sector tenant households and private sector tenant households on waiting lists for reasons other than disability could hardly be more than one-half of the waiting list total, i.e. 29,000. These three categories of duplication add to 41,000, say 40,000 in round terms.

97. The identified elements of the backlog of un-met need for social rented sector housing may be brought together. The first and second categories (paragraphs 88 and 95) are from households and potential households not currently living in social rented housing, so to accommodate them the social housing stock would have to be added to by more than would suffice to meet newly arising need. This is fundamentally different from social sector tenant households in crowded accommodation.

Table 26 Estimates of the backlog of un-met current need for social sector housing in around 2006

Households and potential households not in self-contained accommodation

Owner-occupiers and social sector tenants with needs for social sector housing

Sub-total

Less: duplication

Total

152,000

394,000

40,000

506,000

Source: See paragraphs 75-83, 84-90, and 96

98. All of the owner-occupiers and private sector tenants would release accommodation for sale or rent in the private housing market if housed by the social sector. The sharing private sector tenants would release one-half (or less) of a dwelling each. So the number of dwellings released that correspond to the totals in Table 26 would be in the region of 350,000 to 360,000 a year. Not all would necessarily find buyers or tenants. Caution is needed with these estimates of the backlog of un-met need for social rented housing. The proportion of sharers and concealed families that want separate housing are taken from a source that is now very dated. The figures for owner-occupiers and tenants on waiting list who are not disabled and need social sector housing are very insecure.

Part IV Regional analysis of backlog of current un-met need

- 99. The national estimates in paragraph 83 and 90 of the backlog of un-met need are divided regionally between the North (North East, North West, and Yorkshire and the Humber); Midlands (East Midlands, and West Midlands; London; and South excluding London (East of England, South East, and South West). The way in which the national totals are apportioned between the grouped regions are described below. The lower case roman numerals are those which designate components of need in paragraphs 88 and 95.
- (i) Homeless households in bed and breakfast hotels, hostels and refuges: CLG Live Table 625.
- (ii) Concealed families. The total in paragraph 88 is apportioned between regions pro-rata to concealed households in 2006 as given in the official 2004-bassed regional household projections. This assumes that the proportion of concealed families wanting separate accommodation is the same in all regions.
- (iii) Private sector tenants in shared accommodation. The total is allocated between regions pro-rata to 2001 census figures for households in shared dwellings.

- (iv) Singles in hostels are allocated between regions pro-rata to Supporting People funded "households units" by regions from Survey of Needs and Provision (SNAP), page 3.
- (v) Private sector tenants in crowded accommodation are allocated between regions pro-rata to households with fewer bedrooms than standard, as estimated by CLG from the Survey of English Housing, Live Table No. 806.
- (vi) (a) Owner-occupiers and private sector tenants on housing lists who have long-term disabilities; and (vi) (b), owner-occupier and private sector tenants on housing lists for other reasons, are allocated between regions on the basis of SEH sample numbers. At regional level they are small, so a health warning is necessary.
- (vii) Homeless households in temporary accommodation belonging to private owners. CLG website Live Table 625. Leased from private sector by LA or RSL, or rented direct from a private landlord. Footnote (3) to this table says that this category of accommodation does not match the main tables. The total for England in Live Table 625 is 53,450; so the regional figures are scaled up pro-rata to agree with the England total of 59,000 in paragraph 95.

The allowance for duplication (paragraph 101) is allocated between regions pro-rata to the sum of (iii) private sector tenants in shared accommodation; (v) private sector tenants in crowded accommodation; and private sector tenants who are not disabled and are on housing lists (part of (vi) (b).

100. The estimated division of the total backlog of un-met need between regions is shown in Table 27.

7	Table 27 Backlog of current un-met need for social sector housing around 2006 by region							
		North	Midlands	London	South excl. London	England		
(i)	Homeless households in bed and breakfast hotels, hostels, refuges	2,000	1,000	6,000	4,000	13,000		
(ii)	Concealed families	14,000	11,000	11,000	18,000	54,000		
(iii)	Private sector tenants in shared accommodation	12,000	6,000	26,000	21,000	65,000		
(iv)	Singles in hostels	4,000	3,000	6,000	7,000	20,000		
(v)	Private sector tenants in crowded accommodation	28,000	21,000	48,000	33,000	130,000		
(vi) (a)	Owner-occupiers and private sector tenants with disabilities who are on social sector housing lists	42,000	24,000	16,000	38,000	120,000		
(vi) (b)	Other owner-occupiers and private sector tenants on housing lists	24,000	14,000	17,000	30,000	85,000		
(vii)	Households accepted as homeless and temporarily accommodated in private sector	1,000	1,000	47,000	10,000	59,000		
	Total of above	127,000	81,000	177,000	161,000	546,000		
	Less overlaps	10,000	6,000	13,000	12,000	41,000		
	Net total	117,000	75,000	164,000	149,000	505,000		

Annex A Right to Buy owner-occupier households dissolved

- 1. The number of Right-to-Buy owner-occupier households dissolved by death or by moving to an institution (in most instance residential care or nursing home) is estimated by starting with Right-to-Buy (for brevity RTB) owner-occupiers in the base year, and then estimating how many will still be in being in future years. With one-person households the death of the householder necessarily implies that the household is dissolved. For multi-person households other household members could continue the household after the householder (owner or tenant) dies. Information from housing surveys, currently Survey of English Housing (SEH) about the housing circumstances of widows and widowers indicates that in about 90 percent of instances where a husband or wife dies the survivor carried on the household. Whether the same is so of other types of multi-adult households is not known.
- 2. The number of RTB owner-occupiers in England is estimated from the Survey of English Housing in 2003/04, 2004/05, and 2005/06, the three years combined in order to have a larger sample is shown in Table A.1, analysed by type of household and age group. It is only at ages 60 and upwards that death rates are high enough for many households to be dissolved, though householders aged 40-59 in 2006 will be aged 60-79 in 2026.

Table A.1 Right-to-Buy owner-occupiers in England in 2003/04 to 2005/06 (thousands)

	Age of household representative						
	Under 40	40-59	60-74	75 and over	All ages		
Types of household							
Married couple households	81	323	214	80	697		
Cohabiting couple households	33	39	6	1	79		
Lone parent households – male	3	5	0	0	7		
Lone parent households – female	25	22	2	0	49		
Other multi-person households - male	7	31	11	5	54		
Other multi-person households – female	4	36	19	10	69		
One-person households - male	9	44	42	30	125		
One-person households -female	6	50	77	85	218		
All types of household	167	549	371	211	1,298		

Source: CCHPR from data supplied by Office of the Deputy Prime Minister and Department for Communities and Local Government

- 3. Nearly 80 percent of RTB owner-occupiers are either married or formerly married. Lone parent households must include one or more dependent children, so few of these are RTB owner-occupiers aged 60 and over. The older "other multi-person households" in Table A.1 are likely to include lone parents with only non-dependent children, in the technical sense.
- 4. Detailed calculations are made of the number of married couple and one-person households in the base year who will still be in existence in 2011, 2016, 2021, and 2026. For the other types of household broader brush methods are used.

Married couple households

- 5. As noted in paragraph 1, about 90 percent of husbands and wives continue to live independently. A three-stage calculation is therefore required: (i) the number of married men and women who will die; (ii) the number of one-person successor households that will form as a result; and (iii) how many of the one-person successor households will still be surviving at successive dates. Stage (i) gives the numbers of married couple RTB households surviving, stages (ii) and (iii) the numbers of surviving one-person successor households. In most instances two deaths are needed to bring a married couple household to an end. The calculations are complicated, and simplifying assumptions are needed. The proportions of persons who will survive to specific durations are taken from the 2002/04 Interim Life Table for England and Wales (Annual Abstract of Statistics, 2006 Edition, Table 5.22). Whole population mortality rates are therefore assumed to apply to married men who are Right-to-Buy owner-occupiers. This simplification may lead to an under-statement of the proportions of couple households that will survive. No allowance is however made for future falls in age-specific death rates, or for lighter than average mortality of married men and women. Owner-occupiers as a whole have lighter mortality than tenants; but whether this applies to owner-occupiers who were previously tenants is not known.
- 6. Table A.2 shows the estimated number of RTB owner-occupier married couples in 2006 that would survive as couples to 2026, and the number of surviving one-person successor households. The estimate of survivors does not include an allowance for moves to communal establishments.

(thousands)

Table A.2 Survivors from Right-to-Buy Owner-occupier couple households in 2006

				(,
	2006	2011	2016	2021	2026
Married couple households	697	591	488	390	299
Successor one-person households	0	83	149	186	209
Total	697	674	637	576	508

Source: See text (paragraph 5)

One-person households

7. Survivors of one person RTB owner-occupier households in 2006 are shown in Table A.3. That the proportion of female one-person households that are estimated to survive to 2026 (33 percent) is lower than the proportion of male one-person households that survive till then (42 percent) is the consequence of the different age distributions. Table A.1 above shows 39 percent of female one-person households as being aged 75 and over, as compared with 24 percent of male one-person households.

Table A.3 Survivors from Right-to-Buy owner-occupier one-person households in 2006

(thousands)

	(110000				Janao,
	2006	2011	2016	2021	2026
Married couple households	125	105	85	67	52
Successor one-person households	218	182	142	104	73
Total	343	283	227	171	125

Source: As Table A.2

Other household types and all RTB owner-occupier households

- 8. Table A.1 shows that nearly all of the RTB owner-occupiers in 2006 that were cohabiting couples or lone parent households in 2006 were below age 60. In consequence the proportion of these households that will be dissolved by death between then and 2026 is likely to be very low. Some of the lone parent households may well turn into "other multi-person households" or one-person households as the children cease to be dependent and then leave; but that does not affect the number of surviving households.
- 9. 30 percent of RTB owner-occupier "other multi-person households" with male heads had heads aged 60 and over; for female heads the proportion was 42 percent. The proportion of married couple RTB owner-occupier households with heads aged 60 and over is shown in Table A.1 as 42 percent. No information is available about the proportion of "other multi-person households" which continue when the householder dies, but it is likely to be lower. For present purposes the survival probability is taken to be one-half of that of married couple households (including successor households). For male "other multi-person households" allowance has also been made for the lower proportion aged 60 and over.
- 10. Older households can be dissolved by moves to live in residential care or a nursing home. For both members a couple household to do this together appears to be rare, but for one-person households it is more important. A move to an institution or "communal establishment" (the census term) brings forward in time the dissolution that would otherwise occur at death. When the number of deaths of older people is rising the result is to add to the number of households

dissolved year by year. The effect on the number of survivors is estimated from census information about the proportion of persons living in private households and communal establishments (*Census 2001, National Report for England and Wales* Table 001).

11. Table A.4 brings together estimates of the number of RTB owner-occupier households in 2001 that will survive to selected future years.

Table A.4 Right-to-Buy Owner-occupier households that will survive to 2001, 2016, 2011 and 2026

(thousands)

	2006	2011	2016	2021	2026
Married couple households	697	674	637	576	508
Cohabiting couple households	79	79	77	75	73
Lone parent households	56	56	56	55	55
Other multi-person households	123	116	106	91	74
One-person households	343	283	227	171	125
Effect of moves to communal establishments		-7	-13	-18	-23
All RTB owner-occupier households in being in 2006	1,298	1,201	1,090	950	812

Source: Tables A.1, A.2, and A.3 and see text (paragraphs 9 and 10)

12. Overall 486,000 RTB owner-occupier households in being in 2006 are estimated to have dissolved by 2026. The average dissolution rate for the whole 20 year period is put at 24,000 a year.

Annex B Comparison with 2005 estimate for Shelter of housing demand and need and the 2006 update

1. In 2005 CCHPR produced for Shelter a new set of estimates of housing demand and need, which were published by Shelter in Shelter Housing Investment Project 2005 Update. This included estimates of need for social rented housing, made by methods similar to those used in previous work in the Shelter Housing Investment Project series; and also, for the first time, an estimate of the need for intermediate housing. The estimate of need for social sector rented housing included both newly arising demand and need and the backlog of current un-met need, as previous reports in the series had done. In 2006 the 2005 estimate of newly arising need was up-dated to take account of a new household projection published by the (then) Office of the Deputy Prime Minister (ODPM) which was fully post-2001 census. A comparison is first made between the (2008) estimates of housing demand and need and the 2005 Update; and then between the present estimates and those made in 2006, termed for convenience the 2006 Revised Estimate. The 2005 Update included new estimates of newly arising housing demand and need both at national and regional level. It also included estimates (at national level only) of the backlog of current un-met need. The 2006 Revised Estimate was of newly arising demand and need only at national level. The 2005 estimates of demand and need at regional level and the backlog were not revised.

Housing demand and need at national level

2. The first and in many ways the most important difference between the 2005 and 2008 estimates is the household projections. The 2008 estimates are derived from the official 2004-based projections. In 2005 a modified version of ODPM's 2002-based interim projection was used (ODPM Interim Household Projections in England to 2021). ODPM's interim projections used the same projected household representative rates and marital status in 2001 to 2021 as in the official 1996-based projections (DETR, Projections of Households in England to 2021) but applied to post-2001 census population projections. These interim household projections were revised downwards by CCHPR because the actual number of households in 2001 as estimated from the census was below the projected numbers, which was interpreted as evidence of over-statement in the projection. In Table A.1 the projected increase in households, analysed by type in 2001-21 used in 2005 is compared with the increase in 2006-26 in the 2008 estimates. Numbers of projected households change at steady rates from year to year, so 20 year changes between 2001 and 2021 and 2006 and 2026 may properly be compared.

Table B.1 Projected households by type 2001-21 and 2006-26

	2005-based			2	ed	
	2001	2021	Change	2001	2021	Change
Married couple households	9,680	9,181	-499	9,415	8,898	-517
Cohabiting couple households	1,846	2,717	+871	2,181	3,424	+1,243
Lone parent households	1,236	1,321	+85	1,655	1,928	+273
Other multi-person households	1,643	2,212	+569	1,452	1,775	+7,323
One-person households	6,215	8,717	+2,502	6,816	9,951	+3,135
All households	20,619	24,148	+3,529	21,519	25,975	+4,456

Source: Table 1; and 2005 Update, Table A.1

3. Regional household projections are compared in Table B.2

Table B.2 Regional household projections for 2001-21 and 2006-26

(thousands)

		2005-based			2008-base		
	2001	2021	Increase	2001	2021	Increase	
North East	1,081	1,133	52	1,107	1,229	122	
North West	2,833	3,131	298	2,940	3,453	513	
Yorkshire and Humber	2,087	2,341	245	2,178	2,645	467	
East Midlands	1,738	2,052	314	1,848	2,290	442	
West Midlands	2,157	2,446	289	2,243	2,607	364	
East of England	2,238	2,700	462	2,373	2,968	595	
London	3,091	3,901	810	3,175	3,835	660	
South East	3,303	3,920	617	3,442	4,160	718	
South West	2,091	2,525	434	2,214	2,789	575	
England	20,619	24,148	3,529	21,519	25,975	4,456	

Source: Table 19; and 2005 Update, Table A.2

- 4. The projected increase in households between 2006 and 2026 is 927,000 higher than the projected increase in 2001-2021, primarily as a result of the much higher population projection from which it was derived. Almost 500,000 this difference of 927,000 is in the North or England. In London a considerably smaller increase in households is projected between 2006 and 2026 than between 2001 and 2021, due mainly to revised estimates of movement out of London by immigrants who arrive there, but also other revisions to migration within England.
- 5. A comparison may next be made between the division between the social and market sectors of households in 2021 and 2021, and 2006 and 2026. This shown by type of household in Table B.3.

Table B.3 Households in market sector as proportion of all households in 2001 and 2021, and 2006 and 2026

	2005-based			2	2008-ba	sed
	2001	2021	Difference	2001	2021	Difference
Married couple households	80.1	83.3	+3.2	82.2	84.3	+2.1
Cohabiting couple households	78.9	79.3	+0.4	79.9	80.2	+0.3
Lone parent households	33.3	32.7	-0.9	38.8	38.5	-0.3
Other multi-person households	64.1	64.5	+0.4	67.0	68.6	+1.6
One-person households	62.2	67.9	+5.7	64.8	68.5	+3.7
All households	70.5	72.8	+2.3	72.1	73.2	+1.1

Source: Table 4; and 2005 Update Table B.1

6. The higher market sector proportions in 2006 than in 2001 are partly the result of genuine growth of the market sector, but look rather large to be explained solely in that way. Market sector proportions for the 2005 Update were derived from the Survey of English Housing (SEH) for 2000/01, 2001/02, 2002/03, combined: and for the 2008 report from SEH for 2003/04, 2004/05, and 2005/06 combined. Sampling differences could well have occurred. The differences between the increase in the proportions of households in the market sector between 2006 and 2026 are greatest among married couple households and one-person households. These are the types of households where projecting tenure proportions in future years by "rolling forward" the proportions in the base period is important. The magnitude of the "rolling forward" effect depends on the profile of age-specific tenure projections with respect to age. The size of the "rolling forward" effect on the number of households in each sector is compared in Table B.4. In the table the "overall" projected increase in households is what would occur if the proportionate division between the market and social sectors were the same in the end year as in the start year.

Table B.4 Components of projected changes in numbers of households in the market and social sectors between 2001 and 2021 and 2006 and 2026

(thousands)

	200	1-21	2006-26		
	Market sector	Social sector	Market sector	Social sector	
Overall projected increase in households	+2,488	+1,041	+3,213	+1,243	
Projected changes in mix of household types and age groups	-470	+470	-390	+390	
Projected changes in sector shares specific for household type and age group ("rolling forward")	+1,021	-1,021	+684	-684	
Total change	+3,039	+289	+3,507	+949	

Source: Table 5, and 2005 Update Table B.2

- 7. The projected effect of changes in the mix of types of household and age range is similar in both periods. That it is negative for the market sector is due to the fall in numbers of married couple households in total and still more as a proportion of all households (Table B.1). Of all household categories married couples are most likely to be in the market sector. The projected increase in households in the market sector and reduction in the social sector as a result of "rolling forward" from the base period (i.e. ageing) is 340,000 lower in 2006-26 than in 2001-21. This may be due to sampling. It is the main reason why the increase in social sector households is put at 460,000 higher between 2006 and 2026 than between 2001 and 2021. The other reason is the larger projected increase in households in total.
- 8. The larger increase in the projected number of households in the social sector between 2006 and 2026 is the main reason for the higher estimate of newly arising need in the social housing sector in 2006-26 than between 2001 and 2021. The components of the estimates of newly arising need in 2001-21 and 2006-26 are compared in Table B.5. The increases in vacant dwellings are the result of assuming constant vacancy rates, applied to a larger stock increase. Second homes do not enter the estimate of need for social sector housing. The offset to the loss of re-lets in 2006-26 is larger, because in the 2005 Update it was assumed that in the North and the Midlands only partial offsetting would be needed owing to low housing pressure in parts of these areas. But by the time of the 2008 report housing pressure and house prices had risen in all parts of England, and large increases in household numbers are now foreseen in the Midlands and the North (Table B.2), so full offsetting is assumed in all regions. The estimate of Right-to-Buy owner-occupier households dissolved (Annex A), 486,000 in the 20 year period, is almost exactly the same as estimated for 2001-21, 500,000.
- 9. Five thousands social sector dwelling to replace contraction in the supply of private sector lettings accessible to tenants with Housing Benefit were assumed for 2001-21. By then the fall in letting to private sector tenants with Housing Benefit had clearly been checked. But it had not lasted long enough for no provision to be needed, so one half of the previous 10,000 a year was put in. But more recent information shows no further fall, so no provision is included in the 2008 estimate, as indeed in the 2006 Revision.

Table B.5 Comparison of estimate of newly arising demand and need for housing in twenty year time-span

an energy year anne epime	2005-based (2001-2021)			2008 based (2006-2026)			
	Market Sector	Social rented sector	Total	Market Sector	Social rented sector	Total	
Net increase in households	3,039	490	3,529	3,507	949	4,456	
Vacant dwellings	89	17	106	115	20	135	
Second homes	0	0	0	240	0	240	
Offset to "loss" of re-lets	-369	+369	0	+468	-468	0	
Offset to reduction in private sector lettings to tenants with Housing Benefit	-100	+100	0	0	0	0	
Total required in net increase in housing stock	2,659	976	3,635	3,376	1,455	4,831	
Replacement of losses	320	100	420	not	estimate	d	
Required new provision	2,979	1,076	4,055				

Source: Table 7, 2005 Update, Table 2

Housing demand and need at regional level

- 10. The estimates of demand and need for housing depend on the regional household projections and on the projected division between the market and social sectors. The regional projections are shown in Table B.2. The division between the market and social sectors in the 2008 report is estimated by a different procedure from that employed in the 2005 Update. In the 2005 Update the projected change between 2001 and 2021 in the tenure proportions at national level for the under 30, 30-44, 45-64, and 65 and over age groups was assumed to apply at regional level. These proportions were then combined together by reference to the projected number of households in the four age groups in each region. This procedure compensates for differences in the mix of household ages between regions, for instance the comparatively low proportion of older households in London and comparatively high proportion of older households in the South West.
- 11. In 2008 the division between the market and social sectors at regional level was estimated for each region from the household projection analysed by type of household and age. For married couple and one-person households tenure proportions at the higher ages were forecast by "rolling forward" from the base period, in the same way as for the national estimates. The base period proportions which are "rolled forward" are subject to proportionally greater sampling variation than at national level, which introduces uncertainty in the profile of tenure proportions with respect to age. Inspection of the profiles produced suggested that this procedure might usefully be employed, with

genuine differences between regions in the profiles of tenure proportions with respect to age. Table B.6 compares the start year and end-year market sector proportions in 2001 and 2021 with 2006 and 2026. Of the other elements of demand and need in Table B.5 the offset to the "loss" of re-lets was apportioned between regions in proportion to the number of "Right-to-Buy" owner-occupiers, and the increase in vacant dwellings in proportion to the projected stock increase.

Table B.6 Proportions of households in the market sector by region (thousands)

		2005-b	ased	2008-based		
	2001	2021	Difference	2001	2021	Difference
North East	58.7	61.7	+3.0	62.1	65.2	+3.1
North West	70.6	73.1	+2.5	70.6	71.4	+0.8
Yorkshire and Humber	67.8	70.2	+2.4	71.3	73.7	+2.4
East Midlands	71.5	73.9	+2.4	74.7	76.5	+1.8
West Midlands	67.5	70.0	+2.5	68.1	69.7	+1.6
East of England	73.1	75.4	+2.3	74.7	76.8	+2.1
London	63.9	64.7	+0.8	65.7	66.0	+0.3
South East	77.9	80.2	+2.3	78.3	77.2	-1.1
South West	76.7	79.1	+2.4	78.5	79.7	+1.2
England	70.5	72.8	+2.3	72.1	73.2	+1.1

Source: 2005-based from 2005 Update Table B.4; 2008-based from Table 19

12. The procedure used in the 2005 Update produced very similar changes, all within the plus 2.3 to 2.5 percent, in seven of the nine regions, whereas the separate "rolling forward" calculations for the 2008 estimate produced a much wider variety of increases. The problem is how far they are genuine and how far they are artefacts caused by sampling variation. A rationale for the surprising projected fall in the market sector proportion in the South East is that high proportions of owner-occupiers were reached earlier in the South East, hence smaller differences between market sector proportions in successive age bands at the higher ages.

Intermediate housing

13. Need for intermediate housing was estimated in the same way in both 2005 and 2008, from the number and tenure of new households in each region within a specified range. The lower boundary of the range was defined in both years as ability to afford mortgage payments based on the lower quartile house price. The ages and types of households within these ranges were then examined and judgements made about how many would want intermediate housing if it were available. For 2005 the income ranges were derived from average rents and

lower quartile house prices in 2001/01 to 2003/04; for 2008 the data were for 2004/05, 2005/06, and 2006/07. Table B.7 shows these ranges.

Table B.7 Ranges of gross income for intermediate housing

	2005-k	pased	2008-based		
	Lower	Lower Upper		Upper	
North East	308	225	360	480	
North West	318	284	370	540	
Yorkshire and Humber	318	300	360	550	
East Midlands	325	408	380	700	
West Midlands	324	424	380	680	
East of England	361	567	420	930	
London	403	808	500	1,300	
South East	392	768	450	1,050	
South West	351	569	400	930	

Source: 2005 Update Table E.1; E.3 and E.4; 2008-based from Table 12

- 14. With the gross incomes derived from house prices in 2001/01 to 2003/04 there appeared no intermediate housing need from new households in the North of England, and only a small need in the Midlands, thought there might have been other categories of household that might have wanted intermediate housing. By 2004/05 to 2006/07 the rise in house prices in the North and the Midlands had generated a need for intermediate housing in all regions. In all regions except London the lower boundary was £50-60 a week higher, which indicates that the average housing association rent had risen by much the same amount in each of the regions.
- 15. The number of new households within the income range for intermediate housing depends as well on the estimated number of new households. Both for 2005 and 2008 the source is the Survey of English Housing. But the estimate of new households made in 2008 took account of evidence (A.E. Holmans *Estimate of Households Formed, Moving, Dissolved, and Departing in 1991-2001 and 2001-2006,* CCHPR, forthcoming) that the published figures for new households from SEH were under-stated because they do not include households that make a move within the same year as they were formed. The effect was to raise the estimate of new households formed in one year from 400,000 to 458,000. A comparison is made in Table B.8 of numbers of new households within the range for intermediate housing. Two versions of the 2008 estimates are shown: the first from SEH as published, the second with the allowance for under-statement. Also shown is the tenure of households within the income range, for all tenures together.

Table B.8 Households within the range of intermediate housing

	2005- based	2008-based		
		Unadjusted	Adjusted(a)	
North East	0	4	5	
North West	0	7	8	
Yorkshire and Humber	0	9	10	
East Midlands	2	12	14	
West Midlands	3	8	9	
East of England	12	17	20	
London	19	23	27	
South East	19	26	30	
South West	10	14	16	
England	65	120	139	
Owner-occupiers	39	(b)	57	
Social sector tenants	6	(b)	9	
Private sector tenants	20	(b)	73	

Note: (a) Adjusted for under-statement of total of new households

(b) Not estimated

Source: 2005 Update Table E.5; and Tables 15 and 15

- 16. Particularly important is the much higher proportion of private sector tenants among new households. Part of the reason is that most of the new households not counted in the published totals are likely to have been private sector tenants (who move much more frequently than do social sector tenants and owneroccupiers).
- 17. In the 2005 Update 10 percent of owner-occupiers and two-thirds of private sector tenants within the income range for intermediate housing were assumed to need it. In 2008 the 10 percent proportion was retained for owner-occupiers, but reduced to 40 percent for private sector tenants. With the growth of renting from private landlords by younger households in total and the larger number of new households doing so, it appeared un-realistic to think that two-thirds of new households in the private rented sector could get access to satisfactory housing only by entering the intermediate sector.
- 18. In the 2005 Update all new households requiring intermediate housing were taken to be accommodated by new provision. In the 2008 estimate an assumption was made that owing to increased use of restrictions to ensure that more intermediate housing stayed in the sector when the original households

moved away some of the need could b met by re-letting or re-sale of intermediates housing, in effect "re-cycling" it.

The "backlog" of un-met current housing need

- 19. The main difference between the 2005-based and 2008-based estimates of the backlog is those 2008-based estimates do not include elements derived from information from the early 1990s which had been included in all housing need estimates in the Shelter Housing Investment Project Series from its beginning in 1997 through to the 2005 Update. These elements were important components of housing need, but without fresh information about them. The figures from the early 1990s continued to be used, for lack of anything better to ensure that these categories of need did not disappear from view. These components were: (i) would-be couples living apart; (ii) households applying for council housing for age or medical reasons; (iii) household who were on housing lists because they could not afford mortgage payments and other reasons not to do with age, health, or disability; (iv) single homeless people and hostel residents. For (i), (ii), and (iii) the source was the Routes into Local Authority Housing survey in 1991; for (iv) the source was an estimate by the London Research Centre, scaled up for the whole of England. These estimates were dropped in 2008.
- 20. In their place information was used from the Survey of English Housing (SEH) about the number of owner-occupier and private sector tenant households on social sector housing lists. The numbers of these households that reported long term disability or illness replaced the 1991 survey based estimate of the number of owner-occupier and private rented sector tenant s on housing lists for age or medical reasons. No information is available from SEH about (i), and (iii) above. Instead, households with disabilities were subtracted from the totals of owner-occupiers and private sector tenants on social sector housing lists, and of the remainder one-third assumed to need social sector housing for reasons other than disability. For single homeless and hostel residents an estimate was from the SNAP survey (paragraph 82). These estimates of components of the backlog of un-met need are shown in Table B.9, together with the figures for the 2005 and earlier estimates that they superseded.

Table B.9 Estimates of selected components of the backlog of un-met housing need

	(thous	ands)
	Estimates in 2008	
(a)	Owner-occupiers and private sector tenants on social sector housing lists who have disabilities	120
(b)	Other owner-occupiers and private sector tenants on social sector housing lists (one-third)	85
(c)	Hostel residents (not officially accepted as homeless	20
	Total of above	225
	Estimates in 2005 and earlier	
(d)	Owner-occupiers and private sector tenants applying for council tenancies for age or medical reasons	70
(e)	Owner-occupiers and private sector tenants applying for council tenancies because unable to afford rent or mortgage	50
(f)	Private sector tenants applying for council tenancies because over-crowded	20
(g)	Would be couples living apart, on waiting lists	74
(h)	Adjustment for those saving to buy (negative)	-23
(i)	Single homeless people, hostel residents	110
	Total of above	301

Source: 2005 Update Table F.3; paragraphs 88 and 95

21. "Single homeless people and hostel residents" is a more broadly defined group than hostel residents ((c) in Table B.9). The estimates of need defined from social sector housing lists as estimated from the Survey of English Housing (SEH) in 2008 total 205,000; those derived from *Routes into Local Authority Housing* ((d) to (h) in Table B.9) sum to 191,000. These are higher quality estimates, as of 1991, than the estimates for 2008 made from the Survey of English Housing. That the latter are only 14,000 different may be due to chance.

Table B.10 Estimates of other components of the backlog of un-met housing need

		2005- based	2008- based
(j)	Homeless households in temporary accommodation	101	72
(k)	Concealed families (a)	110	54
(I)	Private sector tenants in shared accommodation (a)	63	65
(m)	Private sector tenants in crowded accommodation	(b)	130
(n)	Adjustment for overlaps	0	-40
	Total	274	281

Notes: (a) Wanting separate accommodation, as estimated from the 1990 Survey of Sharing

(b) See item (f) in Table B.9

Source: As Table B.9

22. The lower figure for concealed families in 2008 is due to a different source (household projection for 2006) being thought preferable, owing to not including so many older people as the census figure. In the absence a survey of preferences of private sector tenants in over-crowded accommodation, all were put into the total of housing need in 2008. In 2005 and earlier, private sector tenants who gave shortage of space as their reason for wanting a council tenancy were included.

Regional estimates of newly arising demand and need

23. A comparison is made in Table B.11 of estimates newly arising need for social sector and intermediate sector housing, and market sector demand. In 2005 a "First Stage" estimate was made of need for social sector housing (2005 Update, Table 3) and then a revised which in which 2,000 a year of newly arising need for social sector rented housing was nationally transferred from London to the South East and East regions on grounds of London's housing capacity not being large enough to accommodate the projected net increase of 810,000 households in twenty years from 2001. Estimates of housing need in London, the South East and East regions were made from the revised estimate. But since such an adjustment was not made in the 2008 estimates of housing demand and need, the comparison is made with the 2005 "First Stage" estimates. The 2005 Update did not include a three-sector regional analysis of housing demand and need at regional level, so a three-sector analysis was derived from the working detail.

Table B.12 2005-based and 2008-based estimates of newly arising demand and need for additional housing

(annual average in thousands)

	2	2005-based			2008-based			
	Social rented	Inter- mediate	Market (a)	Social rented	Inter- mediate	Market		
North East	1	0		2	1	4		
North West	3	0		9	1	16		
Yorkshire and Humber	4	0		6	2	18		
East Midlands	4	2		5	3	15		
West Midlands	4	2		7	3	11		
East of England	7	4		6	4	23		
London	16	8		13	7	16		
South East	6	8		13	6	20		
South West	5	4		6	3	22		
England	50	28		67	30	145		

Note: (a) Not estimated

Source: See text (paragraph 24) for 2005-based; 2008 from Table 27

24. Household projections and the tenure profile with respect to age explain the contrast between the estimates of need for social rented housing.

Comparison with the 2006 Revised Estimate

25. The 2003-based household projections published in March 2006 by the Office of Population Censuses and Surveys made necessary an upward revision of demographically based estimates of newly arising housing demand and need. It raised the projected number of households in England in 2021 from 24,148,000 (Table B.1 above) to 24,782,000, a difference of 634,000 households in total, equivalent to 31,000 a year. Like the 2005 Update, the 2006 Revised Estimate covered the 20 years from 2001 to 2021. A comparison with the present 2008 estimates has therefore to compare 2001-21 with 2006-26. But since projections of the population and households change from year to year at steady rates a comparison between 2001-21 and 2006-26 is valid. A comparison of newly arising demand and need in 2001-21 and 2006-26 is shown in Table B.13. Replacement of losses from the housing stock were included in the 2006 Revised Estimate but have to be omitted from the comparison.

Table B.13 Comparison of 2006 and 2008 estimates of newly arising housing need

	200	6 estima	te	2008 estimate		
	Market sector	Social sector	Total	Market sector	Social sector	Total
Net increase in households	3,652	607	4,259	3,507	949	4,456
Secondary residences	100	0	100	240	0	240
Vacant dwellings	101	15	86	115	20	135
Offset to "loss" of re-lets due to past Right-to-Buy sales	-369	+369	0	-486	+486	0
Net increase in dwelling stock to meet newly arising demand and need	3,484	961	4,445	3,376	1,455	4,831
Annual average	174	48	222	169	73	242

Source: Table 7 and see text

- 26. The larger increase in the number of households in the present estimate is due to the difference between the 2004-based and 2003-based household projections, and hence between the 2004-based and 2003-based population projections. Higher assumed net inward migration is the reason for the difference. The difference between the 2006 estimate of newly arising housing need in the social sector (in 2001-21) and the 2008 estimate for 2006-26 comes from the way the net increase in households is divided between sectors, and the offset to the "loss" of re-lets arising from past Right-to-Buy sales. The second is readily explained. The estimated number of Right-to-Buy owner-occupier households dissolved is almost identical, 500,000 in 2001-2021 and 486,000 in 2006-2026. In the 2006 estimate as in the 2005 Update, however, only 50 percent of these losses in the Midlands and North were assumed to be replaced on grounds of weaker demand there for social sector tenancies. In the 2008 estimate full replacement in all regions is assumed, owing to house purchase costs rising steeply in the Midlands and North a well as in the South of England, and the projected increase in the number of households in the North and Midlands being higher.
- 27. Relevant to how the different division of the projected net increase in total between market and social sectors is to be explained is how the components of change in 2006-26 shown in Table 5 compare with the division in the 2006 estimate. That comparison is in Table B.14.

Table B.14 Components of change in social and market sector in 2006 estimate and 2008 estimate

	2006 es (200°		2008 estimate (2006-26)		
	Market sector	Social sector	Market sector	Social sector	
Overall projected increase in households (unchanged sector shares)	+2,979	+1,280	+3,213	+1,243	
Projected changes in mix of household types and age groups	-469	+469	-390	+390	
Projected changes in sector shares specific for household types and age groups ("rolling forward")	+1,142	-1,142	+684	-684	
Total change	+3.652	+607	+3.507	+949	

Source: Table 5 above; 2006 Revised Estimate, Table 3

- 28. Both the difference in the sector shares with no change from the base period and the difference in the effect of "rolling forward" the sector shares in the higher age groups are due to different base periods for which data on tenure specific for type of households and age were taken from the Survey of English Housing (SEH). For the 2006 estimate, like the 2005 estimate of which it was a revision the data were for 2000/01, 2001/02, and 2002/03 combined; and for the 2008 estimate the SEH data were for 2003/04, 2004/05, and 2005/06 combined. Although combining 3 years' SEH data reduces sampling variation compared with one year's data, sampling variation could still be present. The difference in the base year sector shares, 69.9-30.1 in 2000/01 to 2002/03 and 72.1-27.9 in 2003/04 to 2005/06 is larger than what would be expected from what is known independently about changes of tenure in the 3 year interval. The difference between the estimates of the effect of the interaction of ageing and tenure profiles with respect to age, termed in Table 5 the "rolling forward" effect, is the result SEH data on housing tenure specific for household type and age. There is a difference of 460,000 for this effect.
- 29. An insight into where the differences in the "rolling forward" effect have come from is given by the comparison of the social sector shares in the base year and year end of the 2006 and 2008 projection period, specific for types of households in Table B.15 which compares the present estimates with the preceding sets. The differences between the two sets of social sector shares is mainly among married couple and one-person households, as would be expected. The difference between the 2006 and 2008 estimated "rolling forward" effect is greater among one-person households than among married couple households. Sector shares among one-person households specific for age are particularly subject to sampling variation as a result of comparatively small numbers in the population in some age groups.

Table B.15 Changes in social sector households as proportions of all households in the 2006 and 2008 projections of housing demand and need: analysis by type of household

	2006 projections 2001-2021			2008 projections 2006-2026		
	Base year	End year	Difference	Base year	End year	Difference
Married couple households	20.4	16.8	-3.6	17.8	15.7	-2.1
Cohabiting couple households	21.0	20.2	-0.8	20.1	19.8	-0.3
Lone parent households	65.2	64.8	-0.4	61.1	61.5	+0.4
Other multi-person households	35.5	35.3	-1.2	33.0	31.4	-1.6
One-person households	38.2	31.2	-7.0	35.2	31.5	-3.7
All households	30.0	27.3	-2.7	27.9	26.8	-1.1

Source: Table 4 above; and 2006 Revised Estimate, Table 14